320.9 LLI V. 31 No. 7/8 C. 3

July/August 2005 \$3.95

A publication of the University of Illinois at Springfield

ILLINOIS DOCUMENTS

JUL " 8 2015 .

ILLINOIS STATE LIBRARY

Like five wise old sisters, the inland seas have stories to tell and lessons to teach

GREAT LAKES

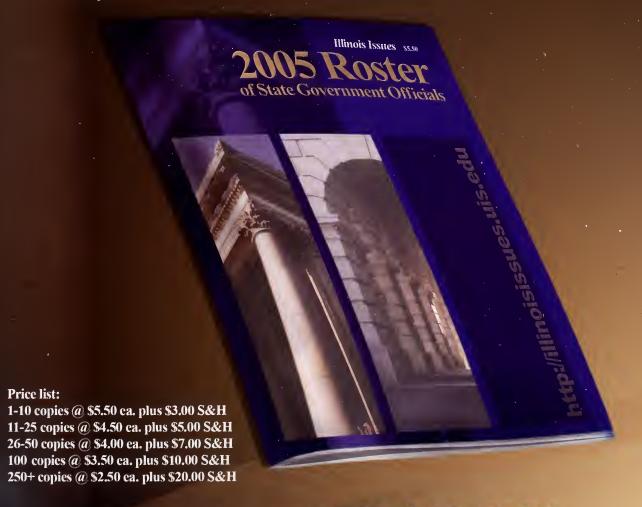
The Most Useful Illinois Directory Published!

ORDER TODAY!

Illinois Issues

2005 Roster of State Government Officials

This 8-1/2 x 11 slick magazine-style roster of state government officials fits neatly into your desk drawer or filing cabinet. Completely updated for 2005, it includes listings for the Governor and all other statewide constitutional officers, as well as major executive agencies and their directors. You'll find all Illinois legislators and their district addresses, phone numbers, fax numbers, e-mail addresses, and Web sites. Also includes the Illinois Supreme Court, the Illinois congressional delegation, media/reporters who cover state government. Plus, hundreds of key staff members who work with these officials.



To order call 217/206-6084





It's summer reading time, naturally

by Peggy Boyer Long

SPECIAL INTROD SAVE 28% OF	I want to subscribe to <i>Il</i> for one full year. (11 issues in all) at the special introdu UCTORY OFFER!! F the cover price!	The Most Useful Illinois Directory Published	ed A
		2005 ROSUS of State Government Offici	Plus!
City	StateZip		with your subscription
Daytime Phone:			un la
Payment enclosed	Account#		p://www.
Bill me later	Exp. date	A THE STATE	isic
MasterCard	Signature		
VISA	For faster service, call 1-800-508-0266 .		
		This popular directory lists the and phone numbers of elected officials in all three branches	names, addresses land appointed s of government.

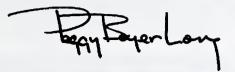
abuses. And we have.

If, in other decades, we denuded the lakes' shorelines, pumped chemicals into

de La Salle, to the tragic 1975 sinking of the *Edmund Fitzgerald* during a stormy November night on Lake Superior.

"more than a thousand boats motored into the waves beneath that moiling black sky." He and his father watched as

	NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES
BUSINESS REPLY MAIL FIRST CLASS MAIL PERMIT NO. 1901 SPRINGFIELD, IL POSTAGE WILL BE PAID BY ADDRESSEE	
Illinois Issues UNIVERSITY OF ILLINOIS AT SPRINGFIELD PO Box 19243 Springfield IL 62794-9980	





It's summer reading time, naturally

by Peggy Boyer Long

We ignore at our peril the power and indifference of nature.

This is worth considering as we head into the far side of summer. Before we hit that hiking trail or take to Lake Michigan in a canoe, we might want to stay indoors long enough to pick up a couple of books that render this essential point in hair-raising detail.

We would do well to read *The Living Great Lakes* by outdoors writer Jerry Dennis and *The Beast in the Garden* by longtime National Public Radio reporter David Baron. Each is part adventure and part morality tale. Each explores the individual and collective consequences of not paying attention, of misreading, of not respecting the natural forces that make, then remake, our physical world and the creatures that share it.

The consequences for Illinoisans are more readily apparent in the book about the Great Lakes. Dennis, who also wrote for this issue of the magazine, seeks to understand and explain these inland seas. He uses his own experiences while growing up near Lake Michigan as the framework for a retrospective on how people have used and misused the lakes. We can learn much from these past abuses. And we have.

If, in other decades, we denuded the lakes' shorelines, pumped chemicals into

The Living Great Lakes: Searching for the Heart of the Inland Seas

by Jerry Dennis Thomas Dunne Books, St. Martin's Griffin, 2003

The Beast in the Garden: A Modern Parable of Man and Nature

by David Baron W.W. Norton & Company, 2004

their waters, harvested their fish to extinction, we have now begun to make amends. Dennis believes this is because those of us who live in the region care about the lakes and have learned that what we do to them, we do to ourselves.

Still, the lakes have many lessons to teach. The most difficult may be that they care for us not at all. They aren't malevolent. Just indifferent.

This might seem obvious enough in broad outline, from the mysterious 1679 disappearance of the *Griffin*, commanded by Réné-Robert Cavelier, Sieur de La Salle, to the tragic 1975 sinking of the *Edmund Fitzgerald* during a stormy November night on Lake Superior.

Civilization's drive for political and economic advantage can make such tragedies understandable. But lives are also lost on the lakes through ignorance or carelessness or willful disregard for the awesomely powerful moods of those five "sisters." It's all too easy to dismiss chances for disaster, to say these are not, after all, the open seas.

But make no mistake. As beautiful as the Great Lakes seem, and are, from the porch of a beach house or the deck of a sailboat on a calm and sunny day, they are dangerous. Blink and they can become cold-blooded killers.

Dennis was a witness to that. In 1967, salmon imported from Oregon thrived in Lake Michigan. Throughout the summer of his 13th year, people traveled to the lake from across the country, in campers and in trucks, to fish for the coho. "A kind of gold rush mentality prevailed," he writes. Nothing, it seems, could deter the anglers, not even ominous weather reports one weekend in late September.

"Thousands of them finished work Friday, loaded their boats, and drove north. But early Saturday, the weather took an unexpected turn." Later, Dennis writes, the Coast Guard estimated that "more than a thousand boats motored into the waves beneath that moiling black sky." He and his father watched as

ADVISORY BOARD

CHAIR

Diana Nelson, executive director, Cross City Campaign for Urban School Reform, Chicago.

VICE CHAIR

Taylor Pensoneau, author and president of the board of directors, Illinois Center for the Book, Springfield.

MEMBERS

James M. Banovetz. professor emeritus of public administration, Northern Illinois University, DeKalb. MarySne Barrett. president, Metropolitan Planning Council, Chicago.

Robert J. Christie, vice president, government relations, Northwestern Memorial Hospital, Chicago.

Darcy Davidsmeyer, director, state government relations, Motorola Inc., Schamburg.

Kathleen Dunn, vice president, government relations, Illinois Hospital Association.

Jim Edgar, senior fellow, Institute of Government

Jim Edgar, senior fellow, Institute of Government and Public Affairs, University of Illinois. Sharan Gist Gilliam, executive vice president, Unison

Maximus Consulting Solutions, Chicago.

Lawrence N. Hansen, vice president, Joyce Foundation, Chicago.

Doris B. Halleb, professorial lecturer, University of Clucago.

Jetta Norris Jones, attorney, Chicago. Robert J. Klans, president and CEO, Oral Health

America, Cluicago.

Mike Lawrence, director, Paul Simon Public Policy
Institute, Southern Illinois University at Carbondale.

Institute, Southern Illinois University at Carbondale.

Joan W. Levy, education consultant, Northbrook.

William E. Lowry, vice president for Human Resources
and Administration, John D. and Catherine T.

MacArthur Foundation, Chicago.

Roberta Lynch, deputy director, American Federation of State, County and Municipal Employees, Chicago. Jeff Mays, president, Illinois Business Roundtable, Chicago.

Abner J. Mikva, visiting professor of law, University of Chicago.

Laurence J. Msall, president, The Civic Federation, Chicago.

Dawn Clark Netsch, professor of law emeritus, Northwestern University School of Law, Chicago. Aurie Pennick, attorney, Chicago.

Betsy A. Plank, principal, Betsy Plank Public Relations, Chicago.

Sylvia Pnente, director, Metropolitan Chicago Initiative, Institute for Latino Studies, University of Notre Dame.

Philip J. Rock, attorney, Rock, Fusco & Associates, LLC, Chicago.

Anna Eleanor Roosevelt, director, community and education relations, Boeing Co., Chicago.
Chuck Scholz, former mayor of Quincy.

Panla Wolff, senior executive, Chicago Metropolis 2020.

EX-OFFICIO MEMBERS

Barbara E. Ferrara, interim executive director, Center for State Policy and Leadership, University of Illinois at Springfield.

Jack H. Knott, director, Institute of Government and Public Affairs, University of Illinois.

FOUNDING MEMBER

Samuel K. Gove, professor emeritus of political science, University of Illinois.

MEMBERS EMERITUS

(years served on board in parentheses) James L. Fletcher (1983-2000), David Kenney (1978-90), Louis H. Masotti (1978-92), James T. Otis (1975-94), David J. Paulus (1988-94), Carl Shier (1978-87). they went out, then watched as they tried to come back when the winds had reached 40 miles an hour and the waves crested 6 to 8 feet.

And they watched, helpless, as two men drowned. "They were so close to shore we could see the hair plastered to their scalps and could see the expressions on their faces. They looked more surprised than frightened. Their eyes were big and they worked their mouths, as if apologizing. They bobbed low in the water in their orange life preservers."

On the lakes, nothing can guarantee our safety. "They died a hundred feet from shore."

Baron also puts a memorable face on the ruthlessness of nature. His book is about the predatory cougar, which has re-established its range in states west of the Mississippi River. *The Beast in the Garden* explores that return and its relationship to changes in the nation's physical and cultural landscape.

The book opens with the 1991 death of a Colorado high school student who was attacked while jogging and partially eaten by a cougar. Baron's story, too, is about people misreading nature, about their reluctance to come to terms with the impact they have on wildlife when they sprawl onto its turf.

The residents of Boulder, who pride themselves on a liberal approach to

nature, were slow to react as cougars began wandering through yards and stalking family pets. Officials with the Colorado Division of Wildlife were slow to react, too. They believed cougars are naturally afraid of people. Maybe they once were, but that had changed. As more people moved into the state's wilder regions, more wild creatures got used to interacting with them. The cougars had begun to see people as prey.

This is a new reality Illinoisans might want to ponder. One wild cougar has been found here, and perhaps a second. Southern Illinois University biologist Clay Nielsen tells us in this issue: "If we have a cougar population in the Midwest, this will be a huge issue. We'll need research on how humans and cougars can get along, how these two conflicting species can coexist."

Baron's book is a good place to start. Though slow to react, the citizens of Colorado, along with state officials and naturalists, finally heeded the wake-up call and began planning for a future that includes cougars at close range.

We might also weigh the advice one sailor offered Dennis about survival on the Great Lakes: Have respect. And stay alert. □

Peggy Boyer Long can be reached at peggyboy@aol.com.

Also recommended

Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation

Edited by Bryan G. Norton, Michael Hutchins, Elizabeth F. Stevens, and Terry L. Maple, with assistance from John Wuichet Smithsonian Institution Press, 1995

However fluid the territorial boundaries of cougars, bears and wolves might prove to be, most Illinoisans will never come face-to-face with a four-legged predator in their backyard. That's not to say we'll never have to confront our relationship with wild beasts, or wrestle with our place in the natural order. For that, we need go no farther than the neighborhood zoo.

The deaths of nine animals that lived in Chicago's Lincoln Park Zoo, for example, have renewed controversies over the role of zoos and, by extension, civilization's impact on other creatures. These aren't new issues. In recent decades, zoos shifted their focus from exhibition and entertainment to education and conservation. And they are likely to continue to change, along with our views of the natural world. *Ethics on the Ark*, published in cooperation with the American Zoo and Aquarium Association, tracks the transition. It dissects the evolving debate over whether zoos are captors or protectors.

Illinois Issues

A publication of the University of Illinois at Springfield

July/August 2005



Great debate, page 16



River bank, page 31

Volume XXXI, No. 7&8



Mother road, page 27

FEATURES

16 Great debate

by Pat Guinane

Leaders from states and provinces in the Great Lakes region are on board with a plan to jointly manage the world's largest freshwater source.

19 Essay Great Lakes

by Jerry Dennis

Like five wise old sisters, the inland seas have stories to tell and lessons to teach.

23 **Books** Lake view

by Robert Kuhn McGregor

The majesty of the Great Lakes must be seen from many angles. They are a last citadel of wilderness and they are little more than a festering sewer.

27 Mother road

by Beverley Scobell

The Prairie State offers plenty of attractions for birds traveling along the Mississippi Flyway.

31 River bank

by Chris Wetterich

Illinois will have to spend state funds on floodplain restoration to draw federal dollars.

Credits: Our cover was designed by Diana L.C. Nelson. The photograph comes to us courtesy of the Great Lakes Environmental Research Laboratory of the National Oceanic and Atmospheric Administration. This image also appears on pages 20-21.

Editorial and business office: HRB 10, University of Illinois at Springfield, One University Plaza, Springfield, IL 62703-5407. Telephone: 217-206-6084. Fax: 217-206-7257, E-mail: illinoistssues@uis.edu. E-mail editor: boyer-long peggy@uis.edu.

Subscription questions: Illinois Issues, Subscription Division, P.O. Box 2795, Springfield, IL 62708-2795 or call 1-800-508-0266. Hours are 8:00 a.m. - 4:30 p.m. Central Time, Monday-Friday (except holidays). Subscriptions: \$39.95 one year/\$72 two years/\$105 three years, student rate is \$20 a year. Individual copy is \$3.95. Back issue is \$5. Illinois Issues is indexed in the PAIS Bulletin and is available electronically on our home page: http://illinoisissues.uis.edu. Illinois Issues (ISSN 0738-9663) is published monthly, except during the summer when July and August are combined. Periodical postage paid at Springfield, IL, and additional mailing offices

Posturaster: Send address changes to Illinois Issues, Subscription Division, P.O. Box 19243, Springfield, IL 62794-9243,
©2005 by Illinois Issues, University of Illinois at Springfield, One University Plaza, Springfield, IL 62703-5407. All rights reserved.
Reproduction in whole or in part without prior written permission is prohibited. Illinois Issues is published by the University of Illinois at Springfield. In addition to university support and subscription income, the magazine is supported by grants and donations. The contents of the magazine do not necessarily reflect the views of the university or the donors

DEPARTMENTS

EDITOR'S NOTEBOOK It's summer reading time, naturally. by Peggy Boyer Long

STATE OF THE STATE Dumps, defiance and a ski hill by Pat Guinane

BRIEFLY

PEOPLE

37 ENDS AND MEANS Wind could power Illinois' future. by Charles N. Wheeler III

STAFF

Director/Executive Editor, Center Publications Peggy Boyer Long

MAGAZINE EDITORIAL

Managing Editor: Maureen Foertsch McKinney Projects Editor: Beverley Scobell Statehouse Bureau Chief: Pat Guinane Columnist: Charles N. Wheeler III Editorial Assistant: Debi Edmund

BOOKS EDITORIAL

Associate Editor: Amy Karhliker Graduate Assistant: Keith Taylor

Circulation & Marketing Manager: Charlene Lambert Business Manager: Toni L. Langdon

PRODUCTION

Art Director: Diana L.C. Nelson

Illinois Issues is published by Center Publications Center for State Policy and Leadership http://cspl.uis.edu



Dumps, defiance and a ski hill make interesting environmental politics

by Pat Guinane

t's not easy to make a molehill out of a 90-foot mountain.

But because of some prickly family politics, Gov. Rod Blagojevich has managed to overshadow sweeping environmental legislation that would shutter illegal dumps, including the giant mound of bricks, concrete and dirt that looms large in Ford Heights, one of Chicago's poorest suburbs.

Blagojevich and his estranged fatherin-law Dick Mell, a longtime Chicago alderman, have a much more personal dump dispute. Holiday cheer turned to family feuding this winter after the governor heard that a second cousin on his wife's side might have been brazenly accepting unacceptable materials at his Joliet landfill.

Blagojevich ordered the state Environmental Protection Agency to inspect the site, in which he believed his father-inlaw had a financial interest. Inspectors found construction debris the dump was not licensed to accept. The landfill cleaned up its act and reopened, but not before the family rift widened.

Mell told the Chicago Sun-Times his son-in-law would "throw anyone under a bus" and charged Blagojevich with trading state appointments for \$50,000 campaign checks, an allegation that prompted a still-pending investigation by the state attorney general and the Cook County state's attorney.

Mell recanted. And Blagojevich

For all his self-proclaimed courage, the governor doesn't stand nearly as tall as the pile of dirt and debris that towers over a section of south suburban Ford Heights.

countered with legislation cracking down on dumps.

The legislation is a veritable wish list for the Illinois EPA. But it also prevents family members of state officials, including fathers-in-law, from having financial interests in landfills. That provision stole the spotlight, especially after Blagojevich boasted of the "testicular virility" he had shown in standing up to Mell.

But for all his self-proclaimed courage, the governor doesn't stand nearly as tall as the pile of dirt and debris that towers over a section of south suburban Ford Heights.

State environmental officials insist that their legislation, Senate Bill 431, does not target a single dump. But the Ford Heights site certainly stands out.

"It is absolutely gigantic. That's the best technical term I could find," says Mike Nechvatal, manager of the Illinois EPA's Division of Land Pollution Control. More precisely, the dumpsite spans almost 40 acres or roughly half of one square city block.

"Hundreds of trucks show up a day," Nechvatal says. "You can imagine the mountain that has been made there. The neighbors testified against it — that it's hurting their property values."

But one man's heap of debris is another's economic development. Ford Heights has been fighting the state. That's because the dump, which opened in 2002, generates cash for the impoverished suburb. And the operator promises to deed the property to the village when he's done dumping, saying the site will become a snow ski hill in a few years.

"Ford Heights is the poorest community in the United States," Chicago attorney William Harte testified on behalf of the village. "They do not have money for police. They do not have money for fire. They do not have money for the necessities."

Ford Heights now gets \$5 for every truckload the dump takes in. That's meant about \$250,000 so far and could bring another \$500,000 in the next three years.

The village and the dump operator unsuccessfully tried to exempt themselves from the EPA's landfill

legislation. But a majority of their proposed amendments could not swing a single "yes" vote from the 22 members of the House Environment and Energy Committee.

The final vote drew laughter from the panel. This after one supporter compared the dump's economic impact to that of riverboat casinos stationed in less desperate suburbs.

For Ford Heights, it was a second failed attempt at protecting its cash cow. Last summer, Blagojevich vetoed legislation excluding the Ford Heights dump from a number of environmental regulations.

The veto came just days after Illinois Attorney General Lisa Madigan filed suit against dump operator John Einoder and two of his companies, Lincoln Ltd. and Land of Lincoln Development Company. The complaint charged Einoder, his companies and the landowners with operating a dump without a permit.

The EPA temporarily sealed the facility in January. But a judge ruled that the state had not proved there was an "emergency condition" that was creating an "immediate danger to health." Since then, the state has sought permission to test the soil and groundwater for contamination. But the two sides have been haggling through pretrial motions.

The dump's supporters argue Senate Bill 431 unjustly bypasses the courts. It would lower the bar for the EPA, requiring the agency to prove "an imminent and substantial endangerment to public health or welfare or the environment" rather than an immediate danger.

"All we want is to be reviewed under the existing law," Harte testified. But for the EPA, the governor's family feud has provided an opportunity to beef up existing regulations.

"People have been looking for loopholes in this law since the early '90s," Nechvatal says. "The best example of someone using a loophole to drive a semi through is what had been known as Silver Shovel sites in Chicago."

Less than a decade ago, a federal corruption probe known as Operation Silver Shovel brought down six Chicago aldermen who had helped developers illegally dump mounds of construction debris on vacant lots in poor city neighborhoods. Hauling construction

One man's heap
of debris is another's
economic development.
Ford Heights has been
fighting the state.

waste to legitimate landfills can be quite costly. The illegal dumps were conveniently located within Chicago, and the price was right.

Senate Bill 431 deals with "clean construction and demolition debris," which includes concrete, bricks, rocks, stone and soil that is uncontaminated and free of protruding metal.

The concrete, for example, can be ground back into smaller particles and recycled. Or clean debris can be used to backfill a mine, quarry or other excavation.

Illinois does not allow such materials to be dumped above ground without a landfill permit. But the state doesn't regulate clean debris sites. That allows operators to claim they just haven't gotten around to recycling an evergrowing pile of concrete. In Ford Heights, the ski hill proposal takes the place of a promise to recycle.

Senate Bill 431 would give the EPA authority to regulate clean fill operations. The agency likely would use the legislation's enhanced seal-order authority to close the Ford Heights facility. And because it already protrudes 90 feet above ground, the site would not be granted a permit to reopen.

Harte says he expects that's what will happen shortly after Gov. Blagojevich signs the bill. It would cost Ford Heights roughly \$500,000 plus any revenue from the planned ski hill and recreation facility. Harte says the village has a contract stipulating that the dump operator keep funds in escrow to build the park once the last load of construction debris has been dumped.

"The assertion that we would put the landfill up and then walk away from it is absurd," he says.

Einoder, operator of the Ford Heights site, is locked in another legal battle

with the state. In 2002, the state charged Einoder and two of his companies with operating an illegal dump near Lynwood, a few miles from the Ford Heights site.

In 2003, a state EPA survey said the dump near Lynwood held more than 700,000 cubic yards of waste, a 16-acre pile measuring more than 80 feet tall.

The case is pending. A Cook County judge originally found some EPA rules unconstitutionally vague. But the Illinois Supreme Court reversed that decision, and felony criminal charges are pending in Cook County.

The dump, meanwhile, is still there. Other individuals are responsible for smaller sites throughout Illinois, most often in poor communities. Nechvatal says one is visible from Interstate 55 traveling north out of Litchfield.

"I'm sure there will always be people looking for a way to avoid the cost of legitimate waste handling. There always has been," he says. "As long as there's money to be made someone will try to do it."

Senate Bill 431 also gives the EPA authority to clean up abandoned couches, car tires and other discarded items that litter roadsides, ravines and vacant lots. The state budget includes \$3 million to clear up such eyesores.

Cleaning up the Ford Heights dump could cost \$30 million, Harte told law-makers. Similarly, the city of Chicago spent more than \$22 million remedying Silver Shovel sites, according to the *Chicago Tribune*.

The EPA says Senate Bill 431 should allow them to go after the molehills before they become much more costly mountains.

"We'll be able to close more sites before they get out of hand," Nechvatal says. "If there is dumping going on, it needs to be stopped. If you argue about it for a year, then the dumping just gets out of hand."

The same might be said for family quarrels. Blagojevich's boasting certainly overshadowed Einoder's actions. And when the operator of a troubled landfill moves down the road and sets up another while facing prosecution on the first site, perhaps it's not the governor's mettle citizens should behold.

Pat Guinane can be reached at capitolbureau@aol.com.

BRIEFLY

LORD GOD BIRD Illinois played role in the tale of a woodpecker wrongly believed extinct

he ivory-billed woodpecker, the largest of North America's woodpeckers, was believed to be extinct. The last confirmed sighting was back in 1944. But earlier this year, a team of researchers, including a former wetland ecologist with the Illinois Natural History Survey and two ornithologists from the Field Museum in Chicago, reported several sightings, as well as video evidence, that the ivory-billed woodpecker still lives in an area called the Big Woods of Arkansas.

"It was exhilarating just to be in the area where one has been spotted and there was a chance we could see one," says David Willard, manager of the bird collection at the Field Museum. Willard was part of the backup crew, along with his fellow Field ornithologist Douglas Stotz.

The ivory-bill has been valued as a prize by Native Americans, early settlers, sideshow operators and, recently, bird conservationists. That's partly because of the ivory-bill's size (about 20 inches long), its plumage (black with a white cape across its back, a white bill and a tilted red crest) and its distinctive double-rap drumming. But it is also admired for its spirit, described as both clever and courageous.

And Illinois has ties to the woodpecker's habitat loss and its restoration.

By the 1930s, the loss of floodplain forests had shrunk the ivory-billed woodpecker's range to isolated swamps along the Tensas River in northern Louisiana. Most of it was in private hands, unofficially a "refuge." In his 2004 book, *The Race to Save the Lord God Bird*, Phillip Hoose describes the legacy left by an Illinois company, the Chicago Mill and Lumber Co., that bought 73,000 acres of mostly virgin bottomland forest in 1939 from the Singer Manufacturing Co.

After the needs of World War II stepped



A Big Woods Conservation Partnership project volunteer searches for ivory-billed woodpeckers in the Cache River National Wildlife Refuge in Arkansas.

For updated news see the Illinois Issues Web site at http://illinoisissues.uis.edu

Photograph copyright David Allen, courtesy of The Nature Conservancy

up timber cutting, it took only five years for the ivory-billed woodpecker's dwindling food supply and nesting trees to be lost to the sawmill. That was when the last official ivory-bill sighting was recorded.

However, since 1982, The Nature Conservancy and its private and government partners have been restoring the bottomland forests, safeguarding more than 120,000 acres within the Big Woods, a corridor about 120 miles long and up to 20 miles wide in eastern Arkansas. This 550,000-acre strip of floodplain forest follows the bayous and rivers that flow into the Mississippi River. It includes the Cache River National Wildlife Refuge,

the area where the ivory-bill was discovered last year. Over the past 10 years, more than 50,000 acres in the floodplain of the Big Woods have been replanted in bottomland hardwoods.

Restoring the ivory-billed woodpecker's habitat is crucial to its survival, says Scott Simon, who

heads the Arkansas chapter of The Nature Conservancy and co-led, with John Fitzpatrick of the Cornell Lab of Ornithology, the research team that recorded the recent sighting. "The Big Woods is big, but not big enough."

Simon, a native of Highland Park who worked for the state's Natural History Survey, says restoration of the forests and the rivers will not only help the ivory-bill but also the native black bear and seven other federally endangered species in the corridor. To that end, the conservancy is adding another 20,000 acres to expand the habitat.

At the height of its range, in the early part of the 19th century, the northern



Top: Au ivory-billed woodpecker in Louisiana, 1935. Observers gave it names such as "Lord God bird" and "Good God bird."

Left: The bark and wood stripped from this tree was viewed as possible evidence of the presence of the ivory-billed woodpecker in the Cache River National Wildlife Refuge in Arkansas.

Photograph copyright Mark Godfrey, courtesy of The Nature Conservancy

edge of the ivory-billed woodpecker's habitat reached into deep southern Illinois, along this state's Cache River. John James Audubon recorded seeing an ivory-bill in 1831 near Cairo. The last sighting was in 1900 near Ullin in Pulaski County. Will the ivory-bill ever return to Illinois?

"We should never give up hope," says Simon. The habitat gets better every year, with larger trees that are more connected and with more total acres, he says. The ivory-bill could reign in all bottomland forests, all the way up to Illinois.

"That," he says, "would be the dream."

Beverley Scobell

Governor inks budget, pensions, loan reforms

A budget predicated on \$2.3 billion in pension deferrals amounts to a payday loan for state government, Republicans bellowed this spring.

Without fanfare, Gov. Rod Blagojevich signed the pension deferral into law last month, along with the massive spending bill that funds most of the \$54 billion state budget.

A few days later, Blagojevich found some face time for the Payday Loan Reform Act. Beginning in December, the new law limits the short-term loans to \$1,000 or 25 percent of monthly income. Borrowers are restricted to two loans at a time, and lenders can't charge more than 15.5 percent interest.

"Payday loans are a nightmare for thousands of working families who find themselves trapped in debts they can't repay," Blagojevich said in a release. "We needed to do something about this."

The governor had made similar remarks regarding the pension systems for suburban and downstate teachers, state and university employees, judges and lawmakers. But Democrats scrapped plans to dramatically reduce benefits for new hires when it became clear Republicans wouldn't toe the line.

Democrats settled for capping endof-career raises in new downstate and suburban teacher contracts at 6 percent a year. They also reduced retirement payouts for new university hires and cut annual interest increases for current university pensioners.

Advancing even the more modest pension plan took solidarity among Democrats, who hold a majority in both the House and Senate. Solidarity didn't come cheaply. The Democrats signed more than 70 "memorandums of understanding" that guaranteed more than \$20 million in pet initiatives.

Most of the agreements fund social service groups, including Catholic Charities, Meals on Wheels Chicago and Ceasefire, a gun-violence prevention group. The pledges also include \$100,000 for an international film festival and \$200,000 for an electronic music fest, both in Chicago.

Pat Guinane

WATER WORKS

Study predicts Illinois' water demand will surge

Water use in Illinois is projected to increase by almost 28 percent, or by 4.4 billion gallons a day, between 2000 and 2025, according to a recent study. To avert crisis, the author says, policy or factors affecting supply and demand will have to change.

The five-county metropolitan Chicago area is expected to boost its water use by the greatest degree — 30 percent in the next two decades - according to a county-level water use study completed earlier this year by Benedykt "Ben" Dziegielewski, a geography professor and executive director of the International Water Resources Association at Southern Illinois University Carbondale.

Dziegielewski calls his study a "conditional statement." The projections are based on such factors as development, population and use of electric-generating technology. "Even as a forecaster, I



The Township Officials of Illinois (TOI), headquartered in the state capital of Springfield, serves as a clearinghouse of information for Illinois townships.

TOI was founded in 1907 and today represents 99 percent of the state's townships.

Township Officials of Illinois

408 South Fifth Street Springfield, Illinois 62701

Bryan E. Smith **Executive Director** Telephone (866) 897-4688 Fax (217) 744-7419 www.toi.org

Photograph courtesy of Southern Illinois University Carbondale



Benedykt "Ben" Dziegielewski, an SIUC geography professor, was lead anthor of a report predicting future water needs in Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. The study projects a 7.3 percent increase in combined publicly supplied water use for the six-state region over the next 20 years. Illinois and Ohio account for the majority of the projected increase. He looked at Illinois' predicted water use by county in a separate study.

would be very happy if the projection does not occur."

Notably, according to the study, "total water use in Illinois is expected to continue to increase despite the recent declining trends in the national estimates of water withdrawals." Dziegielewski also projects that the state's water use will grow at a much faster pace than the population — 28 percent as opposed to 12 percent. Daily per capita water use, at 1,302 gallons in 2000, is projected to climb to 1,487 by 2025.

The major factor behind the surge, he predicts, will be water for electricity generation, which is projected in 2025 to account for 85 percent of all water used in the state.

Dziegielewski met in late June with water supply managers throughout the state to discuss his findings. The group decided to encourage the governor to direct more resources to studying such areas as Kane County that are growing rapidly but don't have a ready water supply, he says.

"What's really missing is a system for regional water supply planning and management," says Derek Winstanley, director of the Illinois State Water Survey, the agency that commissioned Dziegielewski's study. The survey is the state's lead water management agency.

Former Gov. George Ryan created a task force on water supply management that included representatives of key state agencies and local water supply managers. "But now," Winstanley says, "there is no longer a strategy or process that takes geography into account."

A more detailed study of water availability also needs to occur, he says. "We need to look at the naturally occurring boundaries rather than the political boundaries." Underground aquifers such as the Mahomet, which runs across central Illinois from the Indiana border to the Illinois River — are spread across many counties. Slightly more than 20 percent of public supply withdrawals are from groundwater sources, with the remainder coming from surface water sources.

"In northern Illinois, there is a particularly complex situation. Chicago is right beside Lake Michigan, one of the biggest sources of water in the country, and yet the water supply is a concern," Winstanley says. A Supreme Court ruling restricts use of Lake Michigan water.

Shallow aquifers underlie large parts of northeastern Illinois. "We're looking at how much water we can safely extract," he says, noting that sprawl affects recharge of shallow water supplies. "It's not clear how much more water can be extracted."

Winstanley says Illinois, Indiana and Wisconsin formed a regional consortium to discuss the water supply in the region near southern Lake Michigan. "Wisconsin has a fairly detailed water supply analysis process. Illinois does not."

Most states that have created regional water supply and use plans — including California, Colorado and Texas — did so in worst-case situations in which the water supply was about to run out, Winstanley says. The plans those states produced cost between \$10 million and \$20 million over three to five years.

Winstanley says, "Given the apparent impending drought situation in Illinois, it behooves us to look at the lessons learned by other states and implement them."

Maureen Foertsch McKinney

Op: Photograph by Sharon Felker of Massac County

Photograph by Charles Hammona

Op: Photograph by Sharon Felker of Massac County
Right: Photograph by Jonathan Voelz

SHAWNEE BIKING

Tunnel Hill trail wins national designation

Southern Illinois' Tunnel Hill State Trail is one of 37 additions this year to the U.S. Department of the Interior's National Trails System. The 45-mile trail runs through the Shawnee National Forest, stretching from the farm fields

> of Harrisburg into the Cache River State Natural Area's cypress and tupelo swamp. Once an old railroad right-of-way, the trail spans wetlands, bluffs, creeks and forests. Its 543-foot-long

namesake tunnel is between the town of Tunnel Hill and Vienna.

Several communities along the trail offer parking. "It's been a very good asset to our community. It's a good reuse of a resource," says Jonathan Voelz, president of the Johnson County Revitalization Corporation. "We see it as an important part of our tourism effort in Johnson County."

Support Medical Litigation Reform



Illinois State Medical Society



Sangamon
County
Medical
Society



www.RealityMedicine.com



The state finished developing the Tunnel Hill trail, a former Norfolk Southern rail bed, in 2001. The path intersects with others, including the River-to-River, which extends from the Mississippi to the Ohio, and the Trail of Tears, the route the Cherokee Indians took when forced from the east to Oklahoma.

BIOFUEL INCENTIVES

Illinois is making it more affordable for drivers to pump soybean-based biodiesel. Last month, Gov. Rod Blagojevich signed legislation that brings B20 under the state's alternative fuels rebate program.

B20 is 20 percent soybean-based fuel that works in any diesel engine. It's a bit more expensive than regular diesel, but the state will cover the difference through an annual rebate of up to \$4,000 per driver. The rebate also applies to E-85, an 85 percent ethanol blend of gasoline that's compatible with some newer vehicles. But, until now, the program only applied to biodiesel blends that were at least 80 percent soybean-based. That bar was too high for ordinary diesel engines, says Darwin Burkhart, manager of the Illinois Environmental Protection Agency's clean air programs unit. Thirtysix Illinois school districts already fill their buses with B20 through the state's Clean School Bus Program.

"The cost is coming down. We have one school district that's paying only 5 cents more per gallon for their B20 and another one still paying 30 cents more."

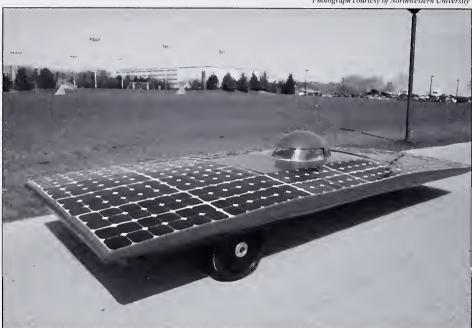
Pat Guinan<mark>e</mark>

RENEWABLE ENERGY

A University of Illinois at Chicago report contends the state has the resources to generate at least 8 percent of its energy through renewable means.

Gov. Rod Blagojevich has said he wants electricity generators in the state to boost their use of renewable resources to an 8 percent share by 2012. The report concludes that wind power would have to account for at least 75 percent of that increase.

Commissioned by the Illinois
Department of Commerce and Economic
Opportunity, the report indicates 7,800 jobs
could be created by heightened use of
renewable energy. The Illinois Commerce
Commission, charged with producing a
renewable energy plan, is reviewing the
report, which assessed the availability
of energy from such sources as wind,
solar, biomass and landfill gas. It explored
potential costs, as well as potential
cconomic pollution control benefits.



Northwestern University engineering students designed and built this car, called nu'Nergy, which qualified—along with vehicles from Illinois State University and Sonthern Illinois University Edwardsville—to run in a North American solar car race later this month. The car can travel up to 70 miles per hour.

GO SUN RACER GO Illinois colleges send solar cars to big race

Students from three Illinois universities designed and built solar cars that qualified to race this summer in a 2,500-mile-long national challenge.

Illinois State University in Normal, Northwestern University in Evanston and Southern Illinois University Edwardsville were among 30 schools nationwide with cars that qualified in May to race in the North American Solar Challenge. That race, which is sponsored by the U.S. Department of Energy, begins July 17 in Austin, Texas, and wraps up 10 days later in Calgary, Alberta.

Qualifying cars are powered by the sun alone. Sunlight is converted into electricity through the use of photovoltaic cells on the cars. The cars in May ran test laps in Topeka, Kan., where they were also judged on mechanical, electrical and safety issues.

Illinois State students dubbed their vehicle Mercury-1. The Northwestern car is called nu'Nergy. Students from the Edwardsville campus named theirs the Cougar Cruiser.

QUOTABLE

66 There is a lack of fortitude to step forward and do what needs to be done. From the perspective of doing what needs to be done, Illinois is an extremely abnormal environment.

James Hacking, who is leaving his leadership post at the State Universities Retirement System to run the state peusion system in Arizona, as quoted in The State Journal-Register. He opposes Illinois' habit of underfunding public pensions.

PEST WATCH

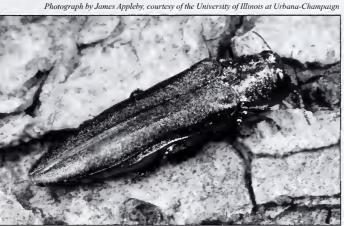
Another Asian beetle threatens state's trees

The height of the camping season has the state's public land guardians on the lookout for the next invasive species poised to cross our borders. Larvae burrowed in firewood brought into the state could emerge and enable a population of emerald ash borer to infect Illinois' 118 million ash trees.

yet, the exotic, half-inch beetle already has destroyed as many as 10 million ash trees in Michigan since 2002, and 90,000 trees have been cut down in Indiana since 2004 to try to stop its spread there.

Though not reported in Illinois trunks and branches of ash trees in midsummer.

"I'm just sure it will come into the state in firewood, probably from Michigan," says James Appleby, a professor in the natural resources and environmental sciences department at the University of Illinois at Urbana-Champaign. There are so many dead ash trees in southeastern Michigan, he says, and many people do not know what's killed them. "I can see homeowners



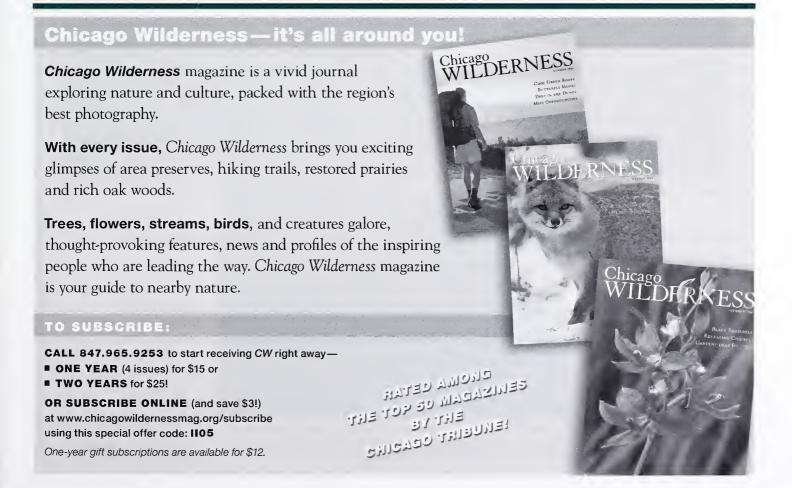
The half-inch-long emerald ash borer is dark green, a feature that becomes obvious in bright light. The invasive pest is most likely to turn up on the

cutting them down — in some towns whole tree-lined streets are dead ash — and giving the wood to friends and relatives for their fireplaces."

Agrilus planipennis gets its common name from its dark green coloring. A native of eastern Asia, the emerald ash borer probably arrived in this country in untreated wood packing material. The beetle does little harm to ash trees as adults, eating just foliage. But its larvae feed on the inner bark, disrupting the tree's ability to transport water and nutrients. It may take a

large tree two to three years, says Appleby, to show signs of infestation and die.

Five years ago, the Asian longhorned beetle threatened to overwhelm the maple trees of Chicago. Quarantines and cutting controlled its spread, though it is a continuing problem in New York and New Jersey. Beverley Scobell



County fair season hits its summer peak

Agricultural fair season is in full swing. Following is a selected listing of upcoming Illinois fairs.

July

Heart of Illinois Fair

Peoria July 8-16

Richland County Fair

Olney July 8-16

Fayette County Fair

Brownstown July 9-16

Jersey County Fair

Jerseyville July 9-17

Ford County Fair

Melvin July 10-16

Moultrie-Douglas

County Fair

Arthur July 10-16

Pike County Fair

Pleasant Hill July 11-18

Cass County Fair

Virginia July 12-16

Mercer County Fair

Aledo July 12-17

Clinton County Fair

Carlyle July 17-23

McDonough County Fair

Macomb July 18-22

Macoupin County Fair

Carlinville July 19-23

Menard County Fair

Petersburg July 19-24

Rock Island County Fair

East Moline July 19-23

Hancock County Fair

Augusta July 20-25

Kane County Fair

St. Charles July 20-24

Champaign County Fair

Urbana

July 22-30

Edwards County Fair

Albion July 22-31

Saline County Fair

Harrisburg July 22-30

Crawford County Fair

Oblong July 23-30

Edgar County Fair

Paris July 23-30 Madison County Fair

Highland July 24-29

Monroe County Fair

Waterloo July 24-31

Fulton County Fair

Lewiston July 25-30

DuPage County Fair

Wheaton July 27-31

Adams County Fair

Mendon

July 28-August 3



In keeping with tradition, a parade will once again kick off the Illinois State Fair, which will run in Springfield August 12-21. Meanwhile, the DuQuoin State Fair is scheduled August 27-September 5.

August

Brown County Fair

Mt. Sterling August 2-7

Knox County Fair

Knoxville

August 2-6

Logan County Fair

Lincoln August 1-7

McLean County Fair

Bloomington

August 3-7

Ogle County Fair

Oregon

August 3-7

Bond County Fair

Greenville

August 4-9

Kendall County Fair

Yorkville August 4-7

Carroll County Fair

Milledgeville August 8-13

Boone County Fair

Belvidere August 9-14

St. Clair County Fair

Belleville August 9-13

Whiteside County Fair

Morrison August 16-20

Winnebago County Fair

Pecatonica

August 16-21

Stephenson County Fair

Freeport

August 23-28

Will County Fair

Peotone

August 24-28

September

Gallatin County Fair

Ridgway

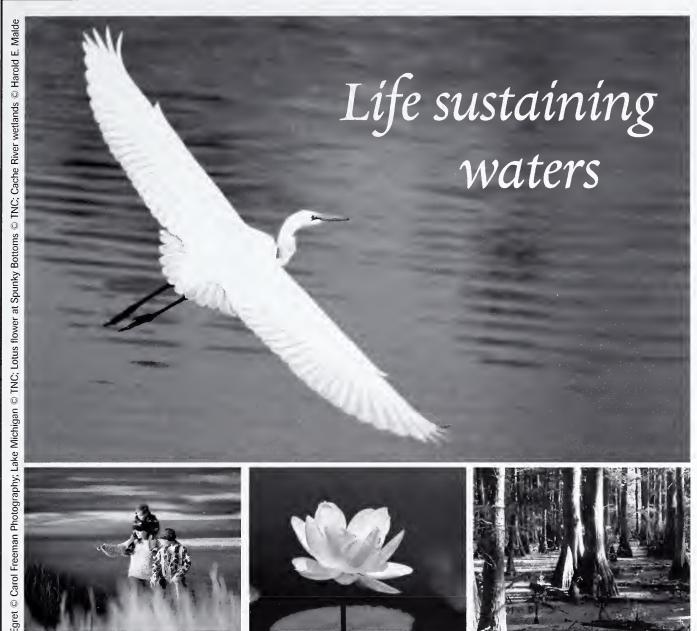
September 3-10

DeKalb County Fair

Sandwich September 7-11

Calhoun County Fair

September 8-11









From the sandy shores of Lake Michigan in the north, to the ancient swamps of the south, Illinois' waters provide crucial drinking water and places to swim, canoe and fish. They also support an astonishing number of plants and animals, such as the unique long-nosed paddlefish and the beautiful American lotus. We are inextricably connected to these waterways, which is why The Nature Conservancy is committed to protecting and restoring critical waters throughout the state.

For more information about The Nature Conservancy in Illinois and around the world, please visit nature.org/illinois.



Great debate

Leaders from states and provinces in the Great Lakes region are on board with a plan to jointly manage the world's largest freshwater source

by Pat Guinane

On the hottest of Chicago's summer days it's not unusual to see an illegally uncorked fire hydrant gushing to the delight of neighborhood children. It's also not uncommon to see a city worker bottle up that fun with the conscientious turn of a wrench.

Call it an early message in moderation for Lake Michigan's young benefactors. Or a microcosm of water management for the Great Lakes region. Either way, the scene illustrates a lesson learned by local policymakers.

"Many of us, myself included, have grown up in the region operating under the myth that the Great Lakes go on forever," says Cameron Davis, executive director of Alliance for the Great Lakes, formerly known as the Lake Michigan Federation. "We now know better. Less than 1 percent of Great Lakes water is renewed every year through rain and snow melt."

The Great Lakes region — Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin and the Canadian provinces of Ontario and Quebec — has the world's largest source of fresh water. And area leaders want to secure this asset for future generations.

State and provincial officials are putting what they hope will be the final touches on a regional plan to responsibly manage the Great Lakes water supply. The agreement would limit local consumption and protect the region's natural resource against what could be a future wave of interest in diverting Great Lakes water to more parched places.

In general, it's still considered too

costly to pipe the water for western irrigation or ship it to international dry spots. But who's to say the benefits won't exceed those costs in coming decades?

Such possibilities have forced politicians to wade into the debate.

"Here's an instance where eight different states, with governors of different political stripes, have come together to say, 'This is important,'" Davis says. "You don't see that very often."

Much of the credit belongs to The Nova Group, an Ontario consulting firm that in 1998 won a Canadian permit to ship tankers of Lake Superior water to arid areas in Asia.

"That was *the* thing that kind of drove this new effort at strengthening water management," says Dan Injerd, chief of Lake Michigan management for the Illinois Department of Natural Resources.

Federal law allows any Great Lakes governor to veto a proposed water diversion. But shortly after The Nova Group's failed endeavor, the Great Lakes governors committed to strengthening their legal standing. The goal was to establish a clear set of supporting principles that could protect their veto power against a constitutional challenge.

The eight governors and two Canadian premiers signed the Great Lakes Charter Annex of 2001, essentially agreeing to update the region's water management policies.

A draft of the new rules was released a year ago, prompting more than 30 public meetings and some 10,000 comments. Participants say that input will be reflected

in a revised report scheduled for release sometime this July. There will be another two months of public comment and the report could be presented to Congress by the end of the year. The two main issues are diversions and consumption within the watershed basin, the area where water flows back into the lakes.

A diversion is akin to the immediate, high-impact drain of an open fire hydrant, while excessive consumption is more like letting the faucet flow while brushing your teeth. From an environmental perspective, both practices are bad. Diversions, of course, are worse. And the July 2004 draft proposal recognizes that.

"Diversions weren't just banned outright. It was an extremely stringent standard, but it was a standard that, in theory, if a project applicant met that standard, they'd get a permit," Injerd says. "All of the jurisdictions would be committed to applying the principles of the standard in their review. In other words, it wouldn't just be subject to a political decision."

A new diversion would require unanimous approval, granting every state veto power over such withdrawals. And any wastewater from a diversion would have to return to the water basin surrounding the Great Lakes, effectively sinking anything similar to The Nova Group's international shipping scheme.

A simple majority vote would suffice for a consumption increase within the basin that exceeds 5 million gallons a per day, whether it be for drinking water or industry. Smaller increases would not prompt a vote.



Eight governors and two Canadian premiers signed on to a charter governing management of the Great Lakes. The charter is being revised this year.

As diversions go, Illinois has a unique situation resulting from the 1900 reversal of the Chicago River. Building the 28-mile Sanitary and Ship Canal forced the river to begin flowing south, taking with it waste that had flowed into the lake and polluted city drinking water.

The engineering feat eventually led to court challenges over the billions of gallons of lake water Chicago was directing downstream. In 1930, the U.S. Supreme Court began limiting the diversion.

Currently, the state can sap no more than 3,200 cubic feet per second of Lake Michigan water, or about 2.1 billion gallons a day, according to the Illinois Department of Natural Resources. While the Chicago River and canal system still get their shares, the state's public water supply is the diversion's deepest dependent.

"Lake Michigan, far and away, is the dominant supply source in the region," Injerd says. "Over half of the residents of the entire state of Illinois use water from Lake Michigan, which illustrates the population concentration we have in the six-county area."

From 1983 until 1994, Illinois

consistently consumed more lake water than it was entitled to, Injerd says. But a reduction in rainfall and lower lake levels helped reverse that trend in the past 11 years. Repairs made to leaky Chicago River structures and new water mains that replaced aging city infrastructure also dropped water usage.

Technological advances and climatic cycles are part of the ebb and flow state officials must consider when a new suburb requests permission to tap into Lake Michigan water. The state's limited diversion allowance also helps to explain why a handful of southeast Chicago suburbs buy their lake water from Indiana towns.

Again, the key is location because the Great Lakes Charter Annex is much more stringent when it comes to water being

used outside the watershed basin — essentially water that could not be funneled back to the lakes after use.

Graphic courtesy of the U.S. Army Corps of Engineers, Detroit District

Take, for example, Waukesha, Wis. About 20 miles west of Milwaukee, the town is just outside the watershed basin. Waukesha wants to use Lake Michigan water because its underground source has high levels of radium. But the 2001 annex brands Waukesha an undue drain on the Great Lakes. Back in Illinois, the state's





Illinois takes 2 billion gallons of water from Lake Michigan daily.

court-sanctioned diversion allows lake water to flow as far away as Plainfield, a Will County suburb nearly 40 miles southwest of Chicago.

Illinois has the only major diversion out of the Great Lakes, taking 2 billion gallons daily, while Canadian rivers continually pour nearly twice that amount into the lakes each day. Expect Illinois to keep its unique status, as the revised draft agreement that debuts this summer is likely to maintain an onerous approval process for new diversions. Other states have much smaller diversions, but most of the Great Lakes water they use is consumed within the watershed basin or extracted from underground aquifers.

"I'm of the mind that in-basin water uses are far more harmful than diversions," says Davis of Alliance for the Great Lakes. "And that's not to say that diversions aren't harmful. It's simply to say that a diversion is very difficult to get, whereas how we use our water inside the basin is still extremely wasteful and allows much room for improvement."

That was one of the major criticisms of last year's draft agreement. If the states and provinces don't reduce their own consumption, how can they restrict

international access to the Great Lakes?

Conservation was one of the core principles incorporated in the Great Lakes Charter Annex of 2001. Preventing basin water loss, doing no harm to the area and improving the system also topped the list.

Some groups would like this year's draft agreement to take a stronger ecological stance, while others argue that mission falls outside of the charter's scope. If nothing else, cementing the agreement could open the door to other environmental efforts.

"We recognize that the opportunity for the large-scale, long-term federal funding is sometime in the future," says David Naftzger, executive director of the Council of Great Lakes Governors.

In addition to the water management objectives addressed by the charter annex, the council is pushing to combat pollution, thwart invasive species, restore coastal wetlands and improve recreational opportunities. A plan to implement these priorities was scheduled for release early this July. Officially recognized by a May 2004 executive order from President George W. Bush, the Great Lakes Regional Collaboration also incorporates cooperative efforts from local governments and federal agencies, including the U.S.

Environmental Protection Agency.

Illinois took a small restoration step last fall, setting aside three decades of stubbornness to sign onto a federal coastal management program that could net \$2 million in annual grants. Illinois originally held out at the behest of wealthy lakefront landowners who feared federal encroachment on their properties.

A much more substantial federal windfall could materialize after the states adopt the two complementary plans for managing, protecting and improving the Great Lakes, Naftzger argues. Illinois representatives are among those in Congress calling for a five-year \$4 billion Great Lakes Restoration Fund. The proposal, however, has been in limbo for two years.

"It's the governors' hope and expectation that this Great Lakes Regional Collaboration leads to large-scale, long-term federal funding, and we've had very encouraging progress over the last few months," Naftzger says.

Implementing the charter annex and the principles outlined by the Council of Great Lakes Governors could be the key to moving the plan off the table and into the federal budget.

GREAT LAKES

Like five wise old sisters, the inland seas have stories to tell and lessons to teach

by Jerry Dennis

ate one night as I stood on the deck of a two-masted schooner motoring up Lake Michigan, I had an encounter with history. The Malabar was a replica of schooners that worked the lakes by the thousands in the final decades of the 19th century. That was part of the history I sensed. Part of it, too, was personal history, the memories of a lifetime brought vividly to mind while seeing new places, or old places in new ways. That night it was possible to imagine

That night it was possible to imagine that the Great Lakes had not changed much in hundreds of years. I saw what the first people saw: The lake calmed

to mirror flatness, the stars as bright on the water as they were in the sky, the shore a low shadow in the distance. I sensed the vast

wash of time and an old longing rose in me—to engage more fully with the world, to get beneath the surface.

to wrap my arms around this place about which I cared so deeply.

Lake Michigan has always been a powerful presence in my life. My mother's father, who died a few months before I was born, worked when he was a young man as a lifesaver at the U.S. Life Saving Station on South Manitou Island. He raised his family a short walk from Lake Michigan on the mainland, on the "little finger" of Michigan's mitten, and told his children stories of shipwrecks and storms and lives saved and lost. I grew up hearing those stories from my mother as we fished the lake or walked the beaches or climbed the dunes at Empire and Sleeping Bear to watch ships passing on the horizon. The Great Lakes have always smelled like home to me. It was inevitable that at some point I would want to write a book about them.

But even after a lifetime on the lakes, I don't think I really understood their magnitude until the four-week journey I took from Michigan to Maine on the Malabar. That trip across the northern quarter of Lake Michigan, the lengths of Huron and Erie, most of Ontario, but none of Lake Superior, was not a casual

tour, but a job. I was one of five men of varied experience who had been assigned to deliver the boat to its new owner in Bar Harbor, and I went along not as a writer but as a volunteer deckhand. As such I would haul sails, sweat lines, pump the bilge, secure dock lines and pilot the yawl boat with which we nudged the Malabar into dockages. I would take my turn to cook and wash dishes, repair toilets and motors, help dismantle the rigging and step the masts for the Erie Canal (then raise the masts and re-rig before we reached saltwater). I would stand watch all hours of the day and night, in all weather, on fresh water, brackish and salt, and take the helm during the worst storm most of us had ever seen.

By then, trying to get a truer sense of the lakes, I had already canoed and camped along the rugged north shore of Superior and on the rocky coast of Isle Royale. I had walked the exemplary waterfront of Chicago, which is the envy of every other Great Lakes city and, increasingly, serves as a model for new waterfront projects. At the

Chicago Yacht Club, I talked my way onto a racing sloop for the Chicago to Mackinac Race, the longest and longest-held freshwater regatta in the world.

I fished on Lake Erie with the biologist most responsible for that lake's remarkable recovery as a world-class fishery, and hiked the Ontario shore of Erie with an octogenarian scuba diver who has probably discovered more Great Lakes shipwrecks than any living person. Part of one February and all of one March, I stayed alone in a cottage on the shore of Lake Michigan and walked the beach every day to observe the dynamics of wind, sand, water and ice. I circled all the lakes by automobile and at every opportunity talked with fishermen, divers, biologists, environmentalists, business owners and other people whose lives are affected every day by the Great Lakes.

During all those trips, I never lost sight of the lakes themselves. They wouldn't allow it. The Great Lakes are like five beautiful and charismatic sisters: willful, tempestuous, frequently charming, impossible to ignore. I had set out to know them, but it was not an easy task. Knowing a small place is hard enough — you can spend a lifetime getting to know your own back yard. The Great Lakes are probably impossible. They're too big, too varied; they sprawl across too large a swath of continent.

Statistics could never do them justice, but they are part of the story. I would gather them by the armload.

The five lakes cover an area larger than England, Wales, Scotland and Northern Ireland combined — some 95,000 square miles. Lake Superior alone is bigger than Maine. The lakes contain about a fifth of the liquid fresh water on the surface of the planet. More fresh water is locked in the polar ice caps and stowed in aquifers, but in no other place can you find a greater reservoir of potable water. They collect the runoff of a drainage basin encompassing 200,000 square miles, which are home to more than 37 million people. About 27 million of them use water drawn directly from the Great Lakes, and many work at

jobs dependent in one way or another on the lakes: For water to operate industrial processes; on supplies and equipment transported via the Great Lakes/St. Lawrence shipping route; on fish caught from them; on vacationers drawn to them.

Of course, central to any history of the lakes is the story of human impact on them. In the past century and a quarter the Great Lakes have suffered so much ecological damage that it is astonishing that they remain so vital. Their resilience is remarkable, but it is important to remember that the challenges they face today are as serious as those that mobilized the environmental movement in the 1960s and led to such landmark legislation as the Clean Water Act of 1972. The difference is that today, instead of blatant industrial polluters, we have to contend with less obvious villains.

Many biologists consider invasive species to be the most

immediate threat to the lakes. When the sea lamprey entered the upper lakes nearly a century ago, it needed only a few decades to eradicate most of the economically important native fish. Today, with vigilant chemical treatment and physical barriers, the lamprey is kept (barely) under control. But other invaders, such as the zebra mussel, round goby, spiny water flea, Eurasian watermilfoil and more than 100 other non-native animals and plants, are impervious to human control and have permanently altered the biological landscape. And new invaders constantly threaten.

Another perennial menace is pollution from persistent toxins, many of them carcinogens dumped into the water long ago, in the carefree decades before environmental regulation. Found in sediments at dozens of sites around the lakes, the toxins are called persistent for good reason: They never seem to go away. They re-emerge every time boats or storms stir the bottom and continue to accumulate in the body tissues of every member of the biotic community, from micro-organisms to fish to humans. We seem to have no choice but to wait the problem out (though it might take centuries) or dispose of contaminated sediments one expensive shovel-full at a time.

Other problems are equally daunting and just as difficult to solve. Cities with outdated waste-disposal systems (and that includes almost every city) pour raw or barely treated sewage into the lakes every time their storm sewers are overwhelmed by rain. Agricultural lands drain fertilizers and pesticides into the lakes, causing algae blooms that can lead to "dead spots" such as the one at the center of Lake Erie. Petroleum products and chemicals are accidentally spilled into the lakes and their tributaries.

Commercial and residential developments erode shorelines, fill wetlands and threaten endangered plants and animals. Every year, more water is diverted from the lakes for human use and the pressure to divert even more is certain to mount. (If projections are accurate, two-thirds of the world's population will face water shortages by 2025, and many eyes will turn eagerly to the Great Lakes).

Hardly a day goes by without news of some setback. As I write this, a study arrives on my desk from the Canadian Environmental Law Association revealing that every year for the past decade Canadian industries and public utilities have pumped a billion kilograms of toxic chemicals into the skies over the Great Lakes basin. Much of it, including 3 million kilograms of carcinogens and 2,000 kilograms of mercury, enters our waters by way of rain and snow.

How can we accommodate such news? Most people, of course, don't bother. It's naive to think that more than a tiny percentage will ever be willing to take action. Yet I remain optimistic. As I listened to people during my journey on the Malabar and other travels around the lakes, one consistent message came through: Many people take the lake's problems personally. I find this terrifically heartening. The lakes are an enormous commons, owned by all of us, and when people accept ownership, they accept responsibility.

Aldo Leopold, the renowned conservationist from Wisconsin, did not write much about the Great Lakes, but he articulated many influential ideas about the lands around them. In his view, it is all part of the same story. What he wrote half a century ago about land use in his beloved Wisconsin remains relevant to all lands and waters. "Health is the capacity of the lake for self-renewal. Conservation is our effort to understand and preserve this capacity," he told us in *A Sand County Almanac*.

In that book, he also told us, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." And, in his journals, he warned us, "One of the penalties of an ecological education is that one lives alone in a world of wounds."

The wounding of the Great Lakes continues. But one difference between Leopold's age and ours is that we are no longer alone in recognizing it.

Last summer, while visiting Washington Island off the tip of Lake Michigan's Door Peninsula, I met an 80-year-old commercial fisherman. He had some questions for me, he said. He was furious because the city of Milwaukee had a few

days earlier allowed 3 billion gallons of human waste to escape into Lake Michigan. The sewage had flowed northward, fouling beaches all the way to Washington Island and raising a figurative and literal stink. The old man had spent his life on the lake and his history was inexorably entwined with it; yet he admitted that he had never gotten involved in environmental issues. That was, in part, he said, because he was always working, but also because he resented any sort of government interference and thought that environmental laws and the people who advocated them were intent upon taking away his personal freedoms.

Now his thinking was changing. More and more he reflected on ideas that Leopold addressed in 1949 in *A Sand County Almanac* and that citizens raised repeatedly in the 1960s and 1970s, when Lake Erie was "The American Dead Sea" and all the lakes were suffering abuses that threatened to destroy them.

But he had never read Leopold and wasn't particularly interested in ideas from the environmental movement.

Nevertheless, in a voice trembling with emotion, he asked two questions that lie at the heart of ecological philosophy:

"What right do they have to dump their sewage in our lake? Don't they realize that what they do affects all of us?"

Jerry Dennis, a Traverse City, Mich.-based environmental writer, is author of several books, including the award-winning The Living Great Lakes: Searching for the Heart of the Inland Seas. His essays have appeared in such publications as The New York Times, Smithsonian and Audubon.



LAKE VIEW

The majesty of the Great Lakes must be seen from many angles. They are a last citadel of wilderness and they are little more than a festering sewer

by Robert Kuhn McGregor

The Great Lakes have beckoned for more than 30 years now. I have witnessed these inland seas in all their varied moods, from the tranquil silence of a summer afternoon to the pregnant violence of a spring morning.

There has been much to write, several ways of seeing. In a single paragraph, any decent writer can paint an image of a fawn lapping from the waters of Lake Michigan. Couple that thought to the knowledge of deadly effluents seeking the same lake every day. What matters is the seeing.

From one angle, the lakes are a last citadel of American wilderness. From another, they are little more than a festering sewer.

The lakes demand a succession of visions, each equally valid. Only then do we begin to know them.

This manner of seeing began long ago. Jean Nicolet saw the lakes as the main road to China; fellow countryman Réné-Robert Cavelier, Sieur de La Salle, saw them as a commercial highway headed straight for France. Subsequent centuries brought visions of beauty, visions of wealth, visions of livelihood. The lakes have been hunted, fished, mined, lumbered, homesteaded, citified. Name it, we have tried it, and each thump of the axe has changed our angle of vision.

We still do not see the lakes clearly; we have raised far too much dust and

smoke. But we have tried. Each and every effort tells us something about ourselves, and perhaps something of the lakes. What is contradictory in our vision is the great contradiction within ourselves: the voice of utility and the whispering of the spirit.

No one person has successfully given voice to this contradiction, blended the spiritual and the utilitarian in a single image of the Great Lakes. There have been lots of scientists who have addressed themselves to nature in the Great Lakes country, lots of literary artists as well. None has come close to marrying the two opposing genres into a competent whole. Scientists are hard-nosed; artists are imaginative. We spend too much time keeping the two apart. To see the lakes as our predecessors found them, we need to look at the two alternative visions, romantic and scientific.

Consider, then, the writings of two mid-19th century visionaries: Margaret Fuller and Louis Agassiz. Each is vaguely recognizable. The development of feminist scholarship has made Margaret Fuller a familiar name, while there are more middle schools named for Louis Agassiz than I would care to count. Both lived in Massachusetts in the 1840s. But just about their only common ground was acquaintance with Henry David Thoreau. Each gave Thoreau heartburn, though for different reasons.

Margaret Fuller (1810-1850) was a fellow transcendentalist, with Ralph Waldo Emerson, Louisa May Alcott and George Ripley, among others, and served as editor of that intellectual movement's journal, *The Dial*. As such, she shaped Thoreau's writing career in a negative way, rejecting several of his submissions. She thought he would make a good farmer.

Louis Agassiz (1807-1873) was one of Europe's leading scientists until he immigrated to America and established zoological studies at Harvard University. Thoreau sparred with him across Emerson's dinner table more than once. The great scientist firmly believed, as did Emerson and most intelligent people, that spontaneous species generation was an established fact. Thoreau thought he was nuts. It was not the only time Thoreau would be correct, and Agassiz tragically wrong, about a scientific issue.

Margaret Fuller was a true scholar, a rarity for women in her time. Expert in German and German Romantic philosophy, she more than held her own in discussions with the transcendental group. She grew tired of the circle, especially as she never received the promised salary for ruthlessly editing *The Dial*. Fuller moved to New York City, and accepted a position as literary editor at Horace Greeley's *Tribune*.

Before starting the job, she and two companions took a little vacation. The



Everywhere she went, she witnessed humanity at war with nature. Passenger pigeons were ruthlessly shot from the sky by the thousands, trees hacked down everywhere as unsightly blights on the landscape. The American West was growing too fast, with unseemly and unplanned haste. "Go ahead" seemed to be the only thought.

1843 result is one of the most famous of all literary works on our region, *A Summer on the Lakes*.

Her itinerary was ambitious. Beginning in Buffalo in June, she took in Niagara Falls before journeying on to Cleveland, then up the lakes to Mackinac and down to Chicago. She took a side trip through the prairie country of central Illinois, then went on to Milwaukee and Sault St. Marie before returning to Buffalo. A hardy traveler, Fuller toured by steamboat, railroad and stagecoach, and covered considerable ground on her own two feet.

Unlike her friend Thoreau, she kept few notes during the trip, a neglect she quickly regretted when she came to realize what an excellent book the journey would make. Working from memory, she produced *A Summer on the Lakes*, written in the popular genre known as the travelogue. These sorts of books were fashionable in her day, an alternative to popular fiction. Fuller wrote her travelogue on the transcendentalist model Thoreau would later use so successfully — a journey at two levels, physical and spiritual.

Margaret Fuller had a good eye, and a sound memory for detail. She was especially troubled by America's overweening utilitarian commercial spirit, epitomized for her by the sight of a man reacting to his first view of a Great Lake by spitting into it. Everywhere she went, she witnessed humanity at war with nature. Passenger pigeons were ruthlessly shot from the sky by the thousands, trees hacked down everywhere as unsightly blights on the landscape. The American West was growing too fast, with unseemly and unplanned haste. "Go ahead" seemed the only thought.

Fuller found in American Indians a more honorable and productive life in nature. Her positive portrayal of Indians, although romanticized considerably, does her great credit, bearing in mind the extreme prejudices of the period.

Most troubling to Fuller were her experiences in central Illinois, where she encountered too many cases of farmwomen isolated and unprepared for the lives they were expected to lead. In 1843, this was still frontier country, with single farms often set miles apart, connected only by muddy, deeply rutted lanes winding through the unremitting

prairie grasses. The life was rough, but wives and daughters, rather than adapting to the conditions, were supposed to be models of eastern seaboard civilization, dainty and refined. Often they were sent east to finishing schools that taught little more than fine needlework, comportment and music — all very well in their places, but of limited use in breaking the prairie to the plow.

With her view of the material Midwest ambivalent at best, it is not surprising that Fuller would seek a more positive message in the spiritual plane of her travels. As she journeyed up the lakes and across the prairies, she saw not only with her eyes, but also with her mind, trying hard to find the true beauty in all this hasty utility. Transcendentalist though she was, even she admitted that the best to hope for was a compromise between nature and civilization, utility tempered by spiritual appreciation. She ended her book on a hopeful note, describing a conversation with fellow passengers as they returned down lake from Mackinac. Much of the talk turned on alternative economic modes, more equitable ways of distributing and using the abundant resources she had seen. America was a great experiment, just getting under way.

For Margaret Fuller, the journey of 1843 was the stepping-stone to an enormously successful career cut horrifically short. For two years, she served as Greeley's literary critic, attaining widespread recognition for her depth and insight. Growing bored, she accepted assignment as European correspondent for the Tribune in 1847. She spent three tumultuous years in Italy, covering a revolution, marrying, giving birth and fleeing the country - her husband was on the wrong side. Returning with her family to America, their ship wrecked off Fire Island, killing Fuller, her son and her husband and destroying her book manuscript describing the Italian adventure.

She left a potent legacy, a transcendental vision of the present and the future middle America, expressed both in harsh and honest appraisal of utilitarian habit and soaring hope for the future of the spirit. A Summer on the Lakes may be the best book ever written about the Great Lakes.

Louis Agassiz followed the travelers' path to the Upper Great Lakes just seven



Cartographer Vincenzo Coronelli's Partie Occidentale du Canada ou de la Nouvelle France, 1688. The title translates to "Western part of Canada or New France." Using information gathered by explorers, Coronelli created what was, in its day, the most accurate representation of the Great Lakes.

years after Margaret Fuller. Like Fuller, Agassiz took the train from Boston to Buffalo, then hopped a steamer to journey up the lakes to Mackinac. This was a very different expedition, however, in both make-up and intent. Four groups of scientists accompanied Agassiz, 24 in all, exclusively male, of course. This was the mid-19th century, and this was science.

Lake Superior, the book that grew out of this expedition, is for the largest part pretty dull reading. Much of the observation is mundane and outdated, while the travel narrative, written by an assistant, is muted and sketchy. The one thing that does stand clear (unintentionally, I am certain) is the degree of hero worship afforded Agassiz by the rest of the team. Here is the story of the great man and his acolytes,

off to inspect the north woods.

Agassiz did have a formidable reputation, a training no American scientist could match. In Paris, he had served as close associate to both Alexander von Humboldt and Georges Cuvier, generally regarded as the greatest scientific thinkers of their time. Agassiz's own contributions to paleontological study were not small; he published extensively on fish and mollusk fossils between 1832 and 1845, and was the first to systematically recognize and describe the influence of past glaciations on European geography. Firmly embedded in the Linnaean classification system, his was one of the many expert voices denying the validity of evolutionary theory.

After coming to America, he sought to situate American science on a firm

footing by establishing the study of comparative zoology. To this end, he was determined to capture specimens of every species in the American fauna, that he might fit them accurately into the Linnaean classification system. Hence the trip to Lake Superior country.

If I possessed a time machine, there are many historical journeys I would try to accompany. Agassiz's expedition of 1850 is not one of them. The scientists, all of them boasting minimal backwoods experience, made their way up to Sault Ste. Marie and out on to Lake Superior by canoe, fighting black flies and mosquitoes the entire way. They spent about a month exploring the big lake on its Canadian shore, making it as far as Thunder Bay. Agassiz gave a lecture every night.



We see just what we want to see, and nothing more.
The naturalist's balanced ecology is the real estate agent's 6 percent. Breaking the thing into parts, we cannot conceive of the whole.

The days were spent collecting specimens. Being cold-blooded scientists, they naturally used guns to further this work — a dead specimen in the hand is so much more amenable to study. They sought to capture samples of every species of fish in the lake, and to this purpose hired an Indian family to catch them a sturgeon. A bit of humanity creeps into the narrative at this point. The scientists solemnly studied the huge fish for a couple of days while the Indians looked on in shocked amazement. The scientists had no intimation of how hard that fish was to catch, or how hungry the Indians were. They kept waiting for a dinner that didn't come.

For a short expedition, the team did well. They gathered enough information on plant and animal distributions to enable Agassiz to fit the data into Humboldt's theories regarding the influence of latitude and altitude on species distribution. They also perceived the enormous effects of glaciation on forest types, soil covers and rock formations. In short, the scientists recovered a

great deal of evidence demonstrating how the Superior region — and the animals living there — had changed through time.

Returning to the Sault, Agassiz and his 23 admirers boarded a steamboat for the return down lake to Buffalo. The great man continued to lecture, and this time he was overheard by a clergyman who became outraged. Entering into spirited debate, the preacher taxed Agassiz for "denying that the world and its inhabitants were all made at once." For him, the Bible settled the matter. How easy it is to imagine the scientists gathered round, grinning smugly, pitying the poor parson and his ignorance.

Knowing the story of that incident only makes the telling of Louis Agassiz's subsequent career all the more strange. The great man coasted on, basking in the worship, supremely confident in his knowledge, until Charles Darwin destroyed his world. When Darwin published On the Origin of Species in 1859, Agassiz quickly assumed the role of ardent critic. He never relented, maintaining to his death in 1873 that evolution was all wet, that God had populated the natural world with immutable species. Yet he himself had done so much to pave the way for Darwin, showing the effects of glaciers, showing how plants and animals are uniquely adapted to their surroundings, showing how the fossil record preserved evidence of species that no longer exist.

The clergyman at Sault Ste. Marie could see it, even if Agassiz could not: The scientist's work could only point to the conclusion that the earth's inhabitants were not all made at once. Agassiz just could not take that final step, and admit the validity of a rival's theory. You cannot help but suspect that all that hero worship in Superior Country had done his judgment no good. He died an embittered man, an academic misfit in the most lively scientific field of the 19th century.

Fuller and Agassiz. Two intriguing stories, two different views of life. How to reconcile them? The question is not simply a conundrum fabricated to vex the minds of modern readers. For Americans living in the 19th century, the problem lay at the very heart of their cultural identity. In less than three

hundred years, the land they called their own had undergone dizzying transformation, from "virgin" wilderness (actually managed by Indians) to a far more heavily populated and cutover world of farms, mines and cities. The logic of their cultural constructs was catching up, and far too rapidly. Arable land, fresh water, lavish mineral deposits, entire forests were melting away at a breathless pace. Resources that many had said would last to infinity were to disappear within 50 years or so. How to make sense of it all?

More than a century and a half later, we are still trying, and still failing. Even as the Great Lakes continue to change – as the water becomes an experiment in chemical composition, as the land is encased in concrete — we persist in viewing the seascape though cultural blinders. We conquer by dividing. The industrialist scoffs at the urban planner who ignores the scientist who denigrates the philosopher. We see just what we want to see, and nothing more. The naturalist's balanced ecology is the real estate agent's 6 percent. Breaking the thing into parts, we cannot conceive of the whole.

Margaret Fuller's "Go ahead" spirit lives on, unquestioning in its grasp for profit, unmindful in its destruction of the element we must drink to live. Louis Agassiz's intellectual descendants measure the damage, but too many of us are too compartmentalized to see, much less understand.

The Great Lakes are what they are. They are all that Margaret Fuller said about them, and Louis Agassiz as well. They are even more than that, more than the sum of all that we as a culture have written about their watery presence. We do know that they matter, that we cannot long survive a world where one-fifth of the fresh water is rendered unlivable. But that is just a tiny fraction of what we need to understand. When we have all become Louis Agassiz and Margaret Fuller, Henry Thoreau and Charles Darwin, that clergyman at the Sault, then we will begin at last to envision the great inland sea.

Robert Kuhn McGregor, an environmental historian at the University of Illinois at Springfield, is a frequent contributor to the magazine.

Mother road

The Prairie State offers plenty of attractions for birds traveling along the Mississippi Flyway

by Beverley Scobell



Snow geese in flight

Migrating birds will begin to cross Illinois in August, as they have for millennia, on their way from breeding grounds as far north as the Arctic coast of Alaska to winter homes as far south as Patagonia.

Millions of avian species choose the Mississippi Flyway as their Mother Road, following the clear path drawn by major north-south waterways. And, with its rivers, lakes, ponds and bogs, its woodlands and grasslands, the Prairie State offers attractions for the longdistance travelers, a veritable vacation spa with plenty of food for energy and ample cover from predators.

Songbirds, shorebirds, raptors and waterfowl take advantage of the state's hospitality twice a year. The National Audubon Society counts more than 250 species of neotropical birds, defined as those that breed in North America during

our summer and spend the winter in Mexico, Central and South America or the Caribbean Islands. Spring migration begins in March and lasts until early June. Fall migration begins in late August and lasts through October.

"We see a wave [of migratory birds] come through in mid-September," says Christopher Whelan, an avian ecologist with the Illinois Natural History Survey based at Midewin National Tallgrass



Hermit thrush



Indigo bunting



Sandhill cranes

Prairie in Will County. "Then again in mid-October another wave, different species of birds, comes through."

Migrants on this route have no mountains to cross, just rolling hills, none higher than a couple thousand feet. They do face modern hazards, though, as habitat has ceded to suburban lawns and urban cliffs of glass and steel.

The flyway, a concept some scientists dispute, is depicted by the U.S. Fish and Wildlife Service as covering more than 3,000 miles, from the mouth of the Mackenzie River, which empties into the Arctic Ocean, to the Mississippi River Delta on the Gulf of Mexico.

The eastern boundary runs through Ontario in Canada to the western shore of Lake Erie, through Indiana to southern Illinois along the Ohio River to the Mississippi. One main course crosses Lake Superior and follows the western shore of Lake Michigan, through Chicago, down the Des Plaines River to the Illinois and Mississippi rivers.

The western boundary runs through west central Canada, through the upper plains to Iowa and Missouri, reaching Illinois at several points along the Mississippi.

However, another Natural History Survey wildlife ecologist, Ron Larkin, says his research on night-flying songbirds — including sparrows, tanagers, thrushes, vireos and warblers — doesn't support the concept of a flyway at all.

"It's something left over from the early settlement days and carried forward by recreational hunters," he says. Larkin uses Doppler radar and radio transmitters to show that at least certain species of songbirds fly in masses, but as individuals, with no indication any is following a particular course. There is no evidence, he says, of rivulets or bands of migrating songbirds moving along a path as marked by arrows on well-accepted migratory maps.

Scientists do agree, though, that birds take advantage of weather patterns wind currents, high and low pressure areas — catching a "tail wind" to save energy. And the prevailing winds blow the way neotropical birds' hard wiring tells them to travel in the spring and fall.

Furthermore, the boundaries are fluid. Because the Mississippi route overlaps the Central Flyway that extends over the Great Plains, sometimes birds that don't normally visit Illinois stop over to use this state's fueling stations. In early May, for example, Whelan spotted a shorebird called Wilson's phalarope feeding at Midewin. Small, long-legged and gray-backed, it has a white breast, rusty foreneck and a dark stripe extending from its eye down its neck. "It was unusual to see one," he says. "Its main migration path is farther to the west."

It's possible the shorebird just took a wrong turn at Davenport, but Whelan thinks it may have been blown off course by a storm. He has also seen a scissortailed flycatcher, the state bird of Oklahoma, a long way from its home range.

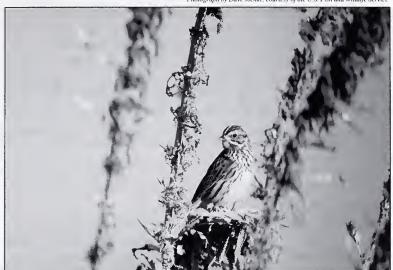
Another issue looms larger for bird lovers than the bureaucratic designation of a flyway or its boundaries: habitat destruction. The Wilson's phalarope, which breeds in Manitoba and the western plains of the United States, is an example of a species in decline because of habitat destruction. It breeds primarily in what are called prairie potholes, small wetland areas on the plains, which are being drained for agriculture.

From a bird's eye view, Illinois isn't the stopover paradise it once was, either. In the past two centuries, wetlands and woodlands have given way to monoculture crops and suburban sprawl. Prairie grasses and berry bushes have given way to landscaped lawns and parks. Quiet beaches have given way to development and disruption. And open air space has given way to buildings with sheet glass and bright lights that confuse birds and cause life-threatening collisions.

Douglas Stotz, an ornithologist with the Field Museum in Chicago, says studies show that turning off unnecessary lights in buildings, a project the city of Chicago started five years ago, saves an estimated tens of thousands of migratory birds each year.

Songbirds fly at night to avoid such predators as migrating hawks that fly in the daytime. But electric lighting messes up birds' navigation senses, and they often die trying to fly out of the maze. Some species seem to be especially hard hit by the double whammy of habitat destruction and collision with humanmade structures.

"The ovenbird has a unique talent for hitting windows," Stotz says. The small



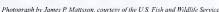
Savannah sparrow



American tree sparrow



Canvasback in flight



warbler is counted among the top 10 bird species found dead or dying after colliding with buildings in Chicago. A woodland species that breeds on the ground, the ovenbird also is declining in numbers because of fragmentation of timbered areas, making it more susceptible to predators.

More poignant, says Stotz, is the deathby-window of Henslow's sparrows, a grassland species endangered to the point of extinction in Illinois.

Magnified to a world scale, habitat destruction in the service of human needs does not bode well for the long-distance travelers. Deforestation, pollution and changing farming practices are taking their toll, in both hemispheres. According to the National

Audubon Society, which conducts an annual bird count, the migratory songbird population in the eastern and prairie states has declined by more than 50 percent in the past three decades.

After frogs, birds are one of the clearest indicators of environmental health. In his announcement on a 2004 study that concluded almost 30 percent of North America's bird species are in significant decline, Audubon President John Flicker said, "Birds signal that we are at risk next."

Yet, banning the use of what biologists call "hard pesticides," such as DDT, and creating special management areas along the flyway that invite birds to rest and feed have led to some success stories. The American bald eagle, the double-

crested cormorant, the white pelican, the giant Canada goose and wood ducks have all benefited and increased in numbers over that past four decades, says Steve Havera, director emeritus of the natural history survey's Forbes Biological Station in Havana.

The white pelican, which nests in the Great Plains and Canada and winters along the Gulf Coast, is one of the neotropical waterfowl that migrate through Illinois in spring and fall.

"We've seen many more pelicans in the last five years than we have in a century," says Havera. "And the giant Canada goose was thought extinct in the early 1960s, and now there are more than a million in the Mississippi Flyway."



Great blue heron



Chipping sparrow

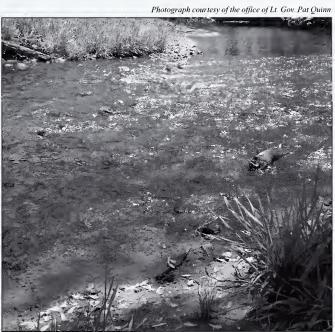


Gadwall with duckling

River bank

Illinois will have to spend state funds on floodplain restoration to draw federal dollars

by Chris Wetterich



Tyler Creek, a tributary of the Fox River

In the 1930s, James Paisley bought about 350 acres along the floodplain of the LaMoine River in Brown County. He cleared the wooded area down to fertile soil, enabling the family to farm the land near Ripley for two generations, though it was prone to floods that could delay or deny a harvest.

But as farming became less profitable, the floods hit Paisley's descendants increasingly hard. So, in 1998, his grandson, Tom Henninger, an employee of the Illinois Environmental Protection Agency, convinced his relatives to sign up with a federal-state program designed to stop river erosion by returning the land to its natural state. For Henninger's family, and other Illinois landowners, the move also offered financial stability.

Now Illinois' continued participation in that program is in doubt. The

Conservation Reserve Enhancement Program hasn't signed up new Illinois enrollees since late 2001, the beginning of what became a four-year state fiscal crisis.

This spring, state officials did loosen the purse strings somewhat. After lobbying by Lt. Gov. Patrick Quinn, lawmakers and Gov. Rod Blagojevich approved spending \$10 million from the state Department of Natural Resources budget to get the program rolling again. But the new state funding isn't nearly enough, putting hundreds of millions of federal dollars for the program in jeopardy.

Under an agreement with the U.S. Department of Agriculture, Illinois needs to secure another \$48 million in state funds. If it succeeds in doing that, the federal government will contribute a total of \$242 million.

But the clock is running. No one can be sure Congress will renew the conservation reserve program when it begins rewriting the federal farm bill next year. "We're on pins and needles right now," says Quinn, who had hoped to garner permanent state funding for the program by closing a tax credit for waste management firms that collect methane gas from landfills.

"Our state got off to a very good start. It's a program that has more than proved itself in terms of protecting our waterways. The money is there. We'll lose the opportunity, and our acreage, if we don't get the money. It's not eternal."

In fact, Illinois, which signed up its first landowners in 1998, was once the top participant. This state already has enrolled and restored 110,000 acres of floodplain along the Illinois River and



Pelicans above the Illinois River

Photograph courtesy of the U.S. Fish and Wildlife Service

its tributaries. About 74,000 acres have been permanently protected through state conservation easements, with 30,000 acres of wetlands restored and permanently protected.

So far, Illinois has put up \$51 million, which has leveraged another \$271 million from the federal government, a four-to-one match. The state also appropriated \$4.8 million in fiscal year 2004 to cover those landowners who had qualified under the federal program and were on the state's waiting list.

But Illinois' budget remains tight and coming up with another \$48 million over the next year will be tough. So Quinn suggests issuing bonds, a move Minnesota is considering. "They [Minnesota] see this as a long-term, decade-long investment in clean water," he says.

But the federal official in charge of Illinois' program has his eye on the short term. The state will need to come up with the cash by next year if it wants to lock in the federal financial commitment. "I'll tell you what," says William Graff, state executive director for the USDA's Farm Service Agency in Illinois, "for every dollar you spend, you get four dollars. It doesn't take me too long to figure out those are the programs I think I'd want to fund first."

In the meantime, sediment and farm chemicals continue to damage the

ecological health of the Illinois River and its major tributaries that are eligible for the program: the Fox, Kankakee, LaMoine, Mackinaw, Sangamon, Spoon and Vermilion rivers. In some spots, the water is no deeper than 18 inches, a condition that drives away fish and waterfowl and endangers and threatens other species.

The conservation reserve program is designed to mitigate those problems. It aims to reduce soil sediment flowing into the lower reaches of the Illinois River by 20 percent, cut phosphorus and nitrogen by 10 percent and increase populations of waterfowl, shorebirds and threatened and endangered species by 15 percent and native fish and mussel stocks by 10 percent.

State officials can measure progress in the acquisition of land in the floodplain. The size of Sanganois Fish and Wildlife Area, for example, has doubled in recent years through permanent easements. But officials are still assessing progress toward meeting the ecological benchmarks.

"The water quality data that has been collected since 1999 shows there has been a reduction in sedimentation rates and nutrient loading," says Debbie Bruce, program support administrator for the Illinois Department of Natural Resources. "The problem is that we have had some dry years, so interpretation

of data takes a long time."

Even after the water quality has been restored, stabilizing the natural vegetation can take another five to 10 years. Then the waterfowl and shorebirds should return.

But the first step is to stop farming up to the riverbank. "Depending on when the flooding happens, [planting] can have a lot of impact on how much soil is coming off," says Bruce. "It's significant when the snow melts in early spring, and they've just planted and they go in and treat it with herbicide, fertilizer — all of that washes into the river."

To prevent this erosion and leaching, the program offers financial incentives to farmers who plant grass, trees and other permanent vegetation along the riverbank. "We gain the water quality benefits, but we're creating corridors of habitat we really need in central Illinois," Bruce says. "The floodplain is where a lot of endangered and threatened species are left in Illinois because the rest [of the state] is urbanized or other types of developments have taken place."

Henninger says the visible differences in the LaMoine River area are extraordinary. Most of his neighbors, he says, also have enrolled in the program. "I can look at the river and see down a ways. It gets really clear. It never used to clear up. The fishing has gotten better. Any time you got any rain, everything that ran off these fields got dumped straight in the river. Now, all that runoff doesn't occur."

Henninger also has put in food plots, including eight acres of soybeans, to attract game. "It's left there for the animals to consume. I see way more deer than I used to," Henninger says. "It benefits not only things that we hunt — deer, turkey, dove and quail — but there's also a lot of migratory birds. I didn't used to see quail down there. Now you see and hear them all over."

There's an economic benefit, too. Henninger's family got an initial payment of about \$123,000 for a permanent easement when they signed up. And they get about \$49,000 a year from the federal government under a 15-year contract.

Formulas determine the per-acre payments for qualified landowners. To qualify, land must be located in a 100-year floodplain that is highly erodible and adjacent to a natural watercourse or land that meets the state's definition of wetlands. That means only those landowners, like Henninger's relatives, who hold acreage in 53 counties along the Illinois River basin are eligible.

But if they are eligible and volunteer to join, the federal government offers them 14- to 15-year contracts that provides yearly payments. The state offers a 15-year or a 35-year contract or a permanent easement on land in the form of a one-time, lump sum payment. A landowner must hold 20 acres to be eligible for the permanent easement. Generally, the longer the easement the larger the payment. The county soil and water conservation districts oversee those easements.

Beyond that, landowners can receive 100 percent reimbursement — 50 percent from the state and 50 percent from the feds — for implementing such approved conservation practices as planting trees or native grasses.

Bruce says local economies benefit, including contractors who do the restorations, the surveys, the legal work. And landowners are also increasingly finding nonagricultural uses for the land that can bring them further profits. Leasing farm ground for hunting, he says, has become the No. 1 alternate use for the program land.

Mudslingers

John Marlin and Pat Quinn are passionate about their mud. While the Conservation Reserve Enhancement Program is designed to prevent sediment from getting into the Illinois River basin, it doesn't address the problem of getting the sediment out. Enter Marlin and his Mud-to-Parks initiative.

Marlin, a senior scientist for the Illinois Department of Natural Resources' Waste Management and Research Center, which is affiliated with the University of Illinois at Urbana-Champaign, came up with the idea of taking the rich sediment at the bottom of the river, putting it on a barge and sending it to a place with a dearth of cheap soil: Chicago.

At least 70 percent of the backwater storage capacity of the Illinois River is gone, with many spots outside the main channel only 18 inches deep, severely limiting its ability to support fish and wildlife. Marlin says he believes some of that sediment can be removed and reused as topsoil. Quinn hails Marlin's effort and says he sees it as a possible revenue opportunity for the state.

"He's a mudologist," the lieutenant governor says of Marlin. "He's an expert on mud." There is enough rich sediment in the Peoria lakes, adjacent to the Illinois River, to cover a football field 10 and a half stories high, Marlin says.

Marlin's pilot project sent 104,000 tons of mud scraped from the bottom of Peoria's lake up the Illinois River on a barge to the old U.S. Steel South Works site in Chicago. It took 68 barges to haul the mud, which covered 13 acres on the site. The Chicago Park District wants to turn unusable slag at that site into a 100-acre park. The sediment was dredged last spring and, by July, lush vegetation had started to grow.

"[The sediment] is basically topsoil that washed into the lake," Marlin says. "We threw grass seed on it. We didn't rake it, fertilize it or anything. Just threw the grass seed on and the roots went down 20 inches during the first year. If you're in a hurry, you can rototill it, you can do lots of things to speed the process up."

The park district basically let the material weather naturally into fertile topsoil.

A \$1.4 million state grant helped get the project rolling. Marlin is talking to business and governmental entities about future projects. Nothing has been funded yet, but "it's just a matter of time and resources. I have no doubt there will be more sediment moving from Peoria Lake to Chicago."

That's because at \$20 a cubic yard, the soil is as cheap, if not cheaper, than buying soil commercially and shipping it to the city on trucks.

The dredging serves a dual purpose, Quinn says. It frees bodies of water of an environmental impediment and gets much-needed topsoil to an urban area.

And, Quinn believes, it could generate revenue. The state of Louisiana is interested in Illinois mud to help stop erosion on that state's gulf coast. In fact, Louisiana is losing 25 square miles of its coastal marshes each year. In theory, that state could use sandy fill material and then place the mud from Peoria Lake on top to refurbish its marshes.

"We've literally got a market going for our topsoil at the bottom of the river," Quinn says. "It could be our oil well. It's that rich."

Chris Wetterich

Henninger's family, though, keeps the property for personal use. "We keep it for our own use for hunting and recreation," he says. "We go down there and we'll fish, take boat rides."

But the future of the program is unclear. Though the state has allocated new money, it could be well into fall before new enrollees can be taken, says Graff. State and federal officials will need to determine the schedule for signups.

The biggest uncertainty is the number of acres the new money will cover. Officials at the Department of Natural Resources believe 20,000 acres. Graff thinks it could be anywhere between 10,000 and 20,000 acres. Either way, it's not enough to meet the need.

"There's about 36,000 acres of demand," Graff says. "[The signup] is going to be short and sweet."

Chris Wetterich is a reporter for The State Journal-Register in Springfield.

Southern Illinois scientist tracks Midwest's cougars

Clay Nielsen is a cougar hunter. His tool is the computer.

Nielsen, a wildlife ecologist in the Cooperative Wildlife Research Laboratory at Southern Illinois University Carbondale, is conducting a two-year study of the habitat potential for cougars in an 11-state region from the Rocky Mountains to the Mississippi River.

Though their habitat is limited mainly to the western states, there have been more than two dozen confirmations of cougars in the Midwest in the past 18 months. Scientists are still evaluating DNA evidence to determine whether a dead cougar found in Mercer County in December was a wild North American cat or an escaped captive with ancestry linking it to South America.

Nielsen was at SIUC finishing up his doctorate in zoology in the summer of 2000 when a dead 200-pound male cougar was found on railroad tracks in Randolph County. "I walked into our lab and there's this big cat hanging from the scales, and I could hardly believe my eyes," says Nielsen, who was present at the necropsy that indicated that the cat had indeed been roaming wild in southern Illinois.

It had been 140 years since the last cougar, also known as mountain lion and puma, was reported killed in Illinois. But reliable evidence of the cougar's return to the Midwest is growing. And Nielsen is at the center of research on the phenomenon.

Nielsen grew up in Nebraska where he had no contact with cougars. He says his interest in the cats stems from research on the bobcat, an animal that bears some similarity to the cougar.

He contacted the Cougar Network, a nonprofit research organization founded in 2002, and became the outfit's director of scientific research. He has also become a sought-after expert on the appearance of cougars in the Midwest and has been quoted in *Time* and other national magazines.

"Clay is a really impressive guy," says Cougar Network Co-Director Mark Dowling, one the organization's founders. "We've seen some of his



"Sightings mean nothing to me," says Clay Nielsen, the Southern Illinois University biologist who is mapping potential cougar habitats in the Midwest. The best evidence, he says, is the body of a dead cougar, a live animal, a good quality photograph or video and such material as hair and scat that can be DNA tested.

research papers, and we were knocked out by them."

SIUC will fund Nielson's cougar project in its first year. He plans to identify habitat potential in a region that stretches east from the Rockies to the Mississippi. Illinois isn't included in the study. The two dead animals found here were at the far western edge of the state near Iowa and Missouri, which have had more verifiable contacts.

Prior to the arrival of European settlers, Nielsen says, cougars thrived in Illinois' woods and prairies and other parts of the Midwest. Like the wolves and the bears, they were driven out by population control and habitat change.

Nielsen says he thinks cougars are turning up in the Midwest because young males are roaming farther as the cougar population in the West rises. He has not seen evidence in the Midwest of adult females or kittens.

"Do I think there remains extant populations that have been in hiding in Illinois over 100 years? Absolutely not," says Nielsen, who is president-elect of the Illinois chapter of The Wildlife Society, the primary networking organization for biologists.

Nielsen, who also is adjunct faculty in the departments of forestry and zoology at SIUC, dismisses a theory he's heard

that a growing deer population is luring cougars east. "A cougar coming from Colorado doesn't know there's deer in Illinois.'

Nielsen recently returned from a conference of Western mountain lion biologists where he learned that cougars with radio collars attached by scientists in the Black Hills of South Dakota turned up as far as 700 miles away. One of the cougars with a radio collar was hit by a train, while the other was prowling Minnesota.

He says the idea of the killer cats roaming wild titillates people for different reasons. "I think there's really heightened interest because they are dangerous." Some people want to see cougars return because they are beautiful. Others are frightened by the prospect. "They're freaked out a cougar is going to kill their kids."

That fear gets at why Nielsen's research is important. "If we have a cougar population in the Midwest, this will be a huge issue. We'll need research on how humans and cougars can get along, how these two conflicting species can coexist. It's really kind of early to tell whether this will become an issue. But I very much want to be out there at the forefront if it happens."

Maureen Foertsch McKinney

SALAMANDERS AND STARFISH

UIUC researcher, SIUC grad find new species

Stephen Karsen, a former zoology student at Southern Illinois University Carbondale, has discovered a new genus and species of salamander. The amateur herpetologist is a 1992 SIUC graduate.

Karsen's find in Korea was detailed in the May issue of *Nature* magazine. Prior to his discovery, scientists had believed that the salamander family, Plethodontidae, existed only in the Americas and western Europe. But in April 2003, Karsen found 10 Asian plethodontid salamanders on slopes in a forest in southwestern Korea. The new species is named *Karsenia koreana*, or, commonly, the Korean crevice salamander.

DNA analysis proved this salamander had never been identified before. *Karsenia koreana* is 5 inches long and reddish brown with silvery dots and flecks and a dorsal stripe. Like other species of salamander, it feeds at night.

Karsen's discovery indicates that 200 million years ago amphibians may have occupied all of the former continent Laurasia before it became separate continents divided by ocean.

Meanwhile, **Chris Mah**, a geology graduate student at the University of Illinois at Urbana-Champaign, has discovered a new species of starfish. Mah, who studies the biodiversity and evolution of marine invertebrates, identified the new species after analyzing a starfish sent from a diver's expedition in the Pacific Ocean off the coast of Palau. He later stumbled upon other specimens of the orange and brown "cornbread star," or *Astrosarkus idipi*, that had been collected in other regions of the world. His investigation showed that this particular starfish, which lives below standard scuba-diving range, had not been previously identified.



Guide publishes SIUC grad student's drawings

Brooks Burr, a professor of ichthyology at Southern Illinois University Carbondale, and **Larry Page**, principal scientist emeritus of the Illinois Natural History Survey, wanted to expand and replace illustrations in an updated edition of their *Peterson Guide to Freshwater Fishes*.

They had to look no further than Burr's Christmas card. Doctoral student **Justin Sipiorski** likes drawing his own holiday greetings, and he sent one with a brook trout to his zoology department adviser.

Now Sipiorski has been commissioned to create illustrations of 150 to 175 species of the nearly 700 in the new fish guide. Published by Houghton-Mifflin, the Peterson series of field guides are internationally recognized for their accurate depictions of species.

H onors

David Baker and **Gene Robinson**, faculty members at the University of Illinois at Urbana-Champaign, have been named to the National Academy of Sciences. The honor recognizes distinguished research and ongoing achievement.

Baker is a professor emeritus of animal sciences and internal medicine, and Robinson is an entomology professor who directs the neuroscience program and holds the G. William Arends Professorship in Integrative Biology.

Baker specializes in animal nutrition and health, while Robinson's work has focused on the genes and behavior of honeybees.

Longtime state legislator retires

State Sen. Kathleen "Kay" Wojcik, a Republican from Schaumburg, was expected to leave the General Assembly at the end of June after serving 23 years.



Kathleen "Kay" Wojcik

She was elected to the Illinois House in 1982 and was appointed to the Senate two years ago when Sen. Doris Karpiel retired.

Wojcik announced in May that she won't seek re-election in 2006 so that she can spend more time with her family, particularly her husband Norbert, who is recuperating from hip surgery.

The Republican chairmen of DuPage and Kane counties, along with committeemen from Cook, Hanover, Palatine and Schaumburg townships, will choose her replacement by the end of July. She says she has recommended that state Rep. **John Millner** of Carol Stream succeed her in the Senate. Millner was Elmhurst's chief of police before taking a seat in the House in 2003.

Wojcik says she may consider lobbying, but she will not run for the congressional seat being vacated by U.S. Rep. Henry Hyde or challenge first-term Rep. Melissa Bean. "When you retire, you retire."

SIU president to retire

James Walker, president of Southern Illinois University, says he plans to retire next year.

He told the SIU Board of Trustees that he plans to step down as leader of the multi-campus university on June 30, 2006. Walker, who became president of the 35,000-student institution in 2000, is SIU's first African-American president. He will turn 65 next year.

Before coming to SIU, Walker was president of Middle Tennessee State University. He began his career as an assistant professor of education at Southern Illinois' Edwardsville campus.



Write us

Your comments are welcome. Please keep them brief (250 words). We reserve the right to excerpt them.

Letters to the Editor Illinois Issues University of Illinois at Springfield Springfield, IL 62794-9243 E-mail address on Internet: boyer-long.peggy@uis.edu

And visit Illinois Issues online by going to: http://illinoisissues.uis.edu.

When you want the real scoop, you know where to find it.

For unsurpassed coverage of state politics, listen for Bill Wheelhouse and Sean Crawford's reports from the Statehouse, weekdays on WUIS 91.9 and WIPA 89.3.



State Week can also be heard on other Illinois public radio stations through the IPR network. Contact your local public radio station for times.

Public Radio Stations	Public TV Stations
WBEZ FM	WEIU
Chicago	Charleston
WCBU FM	WILL
Peoria	Urbana, Champaign
WDCB FM	WSEC/WOEC/WMEC
Glen Ellyn	Springfield, Jacksonville,
	Quincy, Macomb
WGLT FM Normal	WOPT
Normal	WQI [*] I Moline
WILL AM & FM	·
Urbana, Champaign	WSIU
	Carbondale
WIUM/WIUW FM	WTVP
Macomb, Warsaw	WIVP Peoria
WNIJ FM	1 0114
DeKalb, Rockford	WUSI ·
Sterling, LaSalle, Freeport	Olney
WNIU FM	WYCC
Rockford, Dekalb	Chicago
WSIE FM	
Edwardsville	
WUIS/WPIA FM	
Springfield, Pittsfield	



Harness the power of public broadcasting across Illinois!

Chicago to Carbondale Champaign to Quincy

ap into public radio and television stations around the state and make your marketing dollars work for you with a single phone call to PBCI.

(217) 333-9394 for Les Schulte or(309) 438-2257 for Kathryn Carter

website: www.PBCIonline.org

Charles WWhule II



Prairie winds could power Illinois' future

by Charles N. Wheeler III

eading north on Interstate 39 on a summer day as the land rises from the Illinois River valley, a motorist sees a strange sight ahead on the horizon to the west: a shimmering company of slender figures, languidly spiraling their arms in a slow-motion ballet. The vision is not that of magical dancers on an enchanted prairie, however. Instead, it's a peek at what might become a commonplace sight in rural Illinois and a significant part of the state's energy future: a wind farm.

The 63 giant turbines — each more than 300 feet tall from base to rotor tip — comprise the Mendota Hills wind farm in Lee County, the first of its kind in Illinois. The project, which began operations in November 2003, is capable of producing more than 50 megawatts of electricity, enough for the daily needs of more than 12,000 homes. By 2012, though, more than one million households would be powered by electricity generated from wind farms and other renewable sources, under an ambitious plan before the Illinois Commerce Commission.

Proposed by Gov. Rod Blagojevich in February, the Sustainable Energy Plan calls for electric suppliers to derive 2 percent of their power from renewable energy sources by the end of next year. The requirement for renewable energy would increase by one percentage point each year until 2012, when 8 percent of the electricity sold in Illinois would have to come from renewable sources, three-quarters of it wind power.

By 2012, more than one million households would be powered by electricity generated from wind farms and other renewable sources, under an ambitious plan.

In addition, the governor's proposal would require energy conservation measures to be adopted sufficient to reduce the projected growth in electrical use by one-quarter over the next decade. In part, the reduction would come from encouraging investment in more energy-efficient construction, industrial processes and residential products. A compact fluorescent lamp, for example, uses only about one-fourth as much electricity as a conventional incandescent light bulb; today's refrigerators use much less energy than models of a decade ago.

The conservation initiative also envisions providing consumers "real-time" information about electricity prices, so they can choose to use less power when prices spike during hours of peak demand. Something as simple as running the clothes dryer after dark on hot summer days, for instance, would reduce a customer's electric bill.

"Boosting our reliance on homegrown

sources of renewable energy and increasing our investment in energy efficiency measures will not only help Illinois become more energy self-sufficient but provide great benefits to the people of our state, including cleaner air, new jobs, investment in rural communities," the governor said in a February letter to the commission.

Since then, the panel has sought ideas on the plan from utilities, consumer groups, environmentalists and anyone else interested. Surprising, perhaps, the discussion seems to have produced a general consensus on the plan's worth among interests that don't always see eyeto-eye. The state's two major utilities — Commonwealth Edison and Ameren Utilities — have endorsed the plan; so have the Citizens' Utility Board and the Environmental Law and Policy Center.

"The parties on this stuff are all going in the same direction," said Commissioner Robert Lieberman, who's heading the effort to implement the plan. "We call it the Kumbaya docket."

The near-total agreement reflects dramatic changes in energy markets in recent years, Lieberman believes, with greater price volatility prompting electrical suppliers to seek ways to reduce their exposure to market spikes. Taking steps to reduce demand and to rely on renewable power sources not as affected by market volatility is simply the prudent thing to do, Lieberman notes.

Besides helping to stabilize energy

prices, the plan would provide significant economic and environmental benefits, according to a study released last month by the Energy Resources Center at the University of Illinois at Chicago. If the governor's 2012 goals for renewable cnergy and conservation are met, center researchers calculated, more than 15,000 new jobs would be created and the state's economy would get a \$4.7 billion boost.

Moreover, by relying more on such pollution-free renewable sources as wind energy and by reducing consumer demand, significant progress would be made in meeting new federal requirements to cut power plant emissions of sulfur dioxide, a major component of acid rain; nitrogen oxides, which figure in smog production; and mercury, a toxic pollutant that affects fetal nervous system development.

More than 90 percent of the sulfur, nitrogen and carbon oxides now emitted by the state's power plants comes from burning coal, mostly from the west. In contrast, using renewable sources such as wind and solar power to generate electricity produces no pollutants. Using other renewable sources such as landfill gas —

The state's two major utilities — Commonwealth Edison and Ameren Utilities — have endorsed the plan; so have the Citizens' Utility Board and the Environmental Law and Policy Center.

methane produced by decaying organic matter in what used to be called "garbage dumps" - or digested animal manure produces carbon dioxide but little sulfur or nitrogen oxides.

If 8 percent of the state's electricity were produced from renewable sources by 2012, as Blagojevich proposed, sulfur and carbon dioxide emissions would be reduced almost 99 percent from what would be emitted under a "business-asusual" scenario relying on coal-fired plants for the same amount of electricity, the

researchers found. Nitrogen oxides would be slashed more than 86 percent, while no mercury would be emitted, compared to more than one-half ton with coal-fired plants. "Implementing just the renewable energy scenario would reduce sulfur dioxide and nitrogen oxides pollution by 2012 by the equivalent of four typical midsize power plants operating today," the researchers concluded.

Lieberman is optimistic that the commission will finalize a plan soon, although a start-up date might be delayed because of practical questions, such as whether wind turbines can be built quickly enough to provide the extra generating power that would be needed next year.

But the governor's vision of sustainable energy — both increased reliance on renewable, nonpolluting sources and innovative conservation measures — is a sound one for Illinois, promising substantial benefits, both economic and environmental. The sooner it can be implemented, the better.

Charles N. Wheeler III is director of the Public Affairs Reporting program at the University of Illinois at Springfield.



Listen online at www.tristatesradio.com

NEWS, INFORMATION, & ENTERTAINMENT FROM

NATIONAL PUBLIC RADIO



PUBLIC RADIO INTERNATIONAL



GREAT LAKES RADIO CONSORTIUM

TRI STATES PUBLIC RADIO WIUM 91.3/WIUW 89.5

PUBLIC RADIO

News Department

Phone: 309/298-1873 Fax: 309/298-2133 E-mail: rg-egger@wiu.edu



Reach Illinois' **Policy Makers**

Advertise in *Illinois Issues*, the state's leading public affairs magazine. We get your message to the audience you need to reach—the policy makers and decision makers in our state.

Call or write for advertising information.

Illinois Issues

(217) 206-6084 http://illinoisissues.uis.edu



Illinois Issues

The state's leading public affairs magazine

I	would	like t	o help	Illinois Issues	celebrate	another	30	years.
---	-------	--------	--------	-----------------	-----------	---------	-----------	--------

- □\$3,000 Visionary □ \$1,000 Leader ■ \$300 Patron □ \$100 Friend
- **□** \$_____ Yes!

 — Paul Simon Policy Fund (Gift # 334291)
- ☐ My check is enclosed, payable to UIF/Illinois Issues.
- ☐ I wish to pay \$_____by credit card: ☐ VISA ☐ Discover ☐ MasterCard ☐ AmEx

Card number: Expiration Date: Signature ____

Your gift is tax-deductible as allowed by law.

PLEASE RETURN THIS CARD WITH YOUR GIFT. Thank you!

MAIL TO: Illinois Issues, P.O. Box 19243, Springfield, IL 62794-9980

Please print clearly below, and complete all blanks:

Address:

City:_____State:____Zip: _____ E-mail: ___

This is a joint gift with: ___ ☐ My company will match my gift.

Company Name:

CORPORATE MATCHING GIFT PROGRAM

Please visit your personnel or benefits office for matching gift forms and additional information. Your company may have a matching gift program that could double or even triple the amount of your contribution. Your own generous contribution can have an even greater impact on strengthening the excellence of Illinois Issues.

prices, the plan would provide significant economic and environmental benefits, according to a study released last month by the Energy Resources Center at the University of Illinois at Chicago. If the governor's 2012 goals for renewable energy and conservation are met, center researchers calculated, more than 15,000 new jobs would be created and the state's economy would get a \$4.7 billion boost.

Morcover, by relying more on such pollution-free renewable sources as wind energy and by reducing consumer demand, significant progress would be made in meeting new federal requirements to cut power plant emissions of sulfur dioxide, a major component of acid rain; nitrogen oxides, which figure in smog production; and mercury, a toxic pollutant that affects fetal nervous system development.

More than 90 percent of the sulfur, nitrogen and carbon oxides now emitted by the state's power plants comes from burning coal, mostly from the west. In contrast, using renewable sources such

The state's two major utilities
— Commonwealth Edison
and Ameren Utilities — have
endorsed the plan; so have
the Citizens' Utility Board
and the Environmental
Law and Policy Center.

methane produced by decaying organic matter in what used to be called "garbage dumps" — or digested animal manure produces carbon dioxide but little sulfur or nitrogen oxides.

If 8 percent of the state's electricity were produced from renewable sources by 2012, as Blagojevich proposed, sulfur and carbon dioxide emissions would be reduced almost 99 percent from what

researchers found. Nitrogen oxides would be slashed more than 86 percent, while no mercury would be emitted, compared to more than one-half ton with coal-fired plants. "Implementing just the renewable energy scenario would reduce sulfur dioxide and nitrogen oxides pollution by 2012 by the equivalent of four typical midsize power plants operating today," the researchers concluded.

Lieberman is optimistic that the commission will finalize a plan soon, although a start-up date might be delayed because of practical questions, such as whether wind turbines can be built quickly enough to provide the extra generating power that would be needed next year.

But the governor's vision of sustainable energy — both increased reliance on renewable, nonpolluting sources and innovative conservation measures — is a sound one for Illinois, promising substantial benefits, both economic and environmental. The sooner it can be implemented, the better.



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 1901 SPRINGFIELD, IL

POSTAGE WILL BE PAID BY ADDRESSEE

Illinois Issues

UNIVERSITY OF ILLINOIS AT SPRINGFIELD

PO Box 19243 Springfield IL 62794-9980

Jallandallan lalanda lalada da lalada da lalada

News Department

Phone: 309/298-1873 Fax: 309/298-2133 E-mail: rg-egger@wiu.edu

(217) 206-6084 http://illinoisissues.uis.edu

Ilinois Farm Bureau builds bridges between rural and urban people



Understanding the unique needs of all areas of Illinois makes our state legislators better lawmakers. IFB's *Adopt a Legislator Program* links urban legislators with rural farm families.

Through on-farm visits our state lawmakers get a unique perspective of life in the country, and help build lifetime bonds.

For more information go to:

www.ilfb.org



IFB thanks those legislators who extended their hand of friendship through the *Adopt a Legislator Program*:

Frank Aguilar, Patricia Bailey, Suzanne Bassi, Maria Antonia (Toni) Berrios, Richard Bradley, James Biosnahan, Daniel Burke, Linda Chapa La Via, Annazette Collins, Elizabeth Coulson, M. Maggie Crotty, John Cullerton, William Davis, Miguel del Valle, James DeLeo, William Delgado, Kenneth Dunkin, Sara Feigenholtz, Mary Flowers, John Fritchey, Paul Froehlich, Susan Garrett, Calvin Giles, Deborah Graham, Julie Hamos, Don Harmon, Rickey Hendon, Constance Howard, Randall Hultgren, Mattie Hunter, Wendell Jones, Emil Jones, Jr., Kevin Joyce, Robin Kelly, Louis Lang, Kimberly Lightford, Joseph Lyons, Edward Maloney, Iris Martinez, Karen May, Michael McAuliffe, Kevin McCarthy, Larry McKeon, Susana Mendoza, David Miller, Robert Molaro, Antonio Munoz, Elaine Nekritz, Harry Osterman, Carole Pankau, Terry Parke, Christine Radogno, Robert Rita, Carol Ronen, Martin Sandoval, Angelo (Skip) Saviano, Cynthina Soto, David Sullivan, Donne Trotter, Arthur Turner, Louis Viverito, and Karen Yarbrough

INPR4033GS0405

NEWS YOU CAN USE!

Illinois has more than 600 newspapers & each week thousands of news stories run on every topic imaginable.

But news today is more than just newspapers. That's why the Illinois Press Clipping Bureau account is tailored to your precise requests while still providing the most affordable way for you to know what appears in all Illinois newspapers and on TV newscasts in several major markets

- all for just \$65 a month & 65¢ a clip!

WHAT WE SEARCH

- International, National, State & Regional Press.
- TV News Tapes/Transcripts
- Online Services
- · Financial Data & Stories
- Historic Documents
- Events of Note
- Annual Reports
- Economic Trends

WHAT WE DELIVER

- Breaking News
- · Legislation & Regulations
- Industry News & Trends
- · Competitive News
- News Businesses, Products
 & Services
- Candidates & Campaigns
- Publicity Efforts
- Mention of Names & Groups

WHAT WE OFFER

- Traditional Newspaper Stories & Photos
- TV News Mentions
- TV Tapes & Transcripts
- · Emailed Clips
- Online Access
- Archive retrieval
- Daily, Weekly or Monthly Delivery

Contact Shari Mulvany at (217) 241-1300 • smulvany@il-press.com ELECTRONIC MAIL DELIVERY IS AVAILABLE!





THE TOP LAWYERS

Congratulations to these LAWYERS, recommended by their peers in a statewide survey, to be among the TOP LAWYERS in Illinois.



Charles F. Helsten	Hinshaw & Culbertson LLP	Rockford	(815) 490-4906	Gov't/Muni/Lobby	
Thomas J. Lester	Hinshaw & Culbertson LLP	Rockford	(815) 490-4900	Gov't/Muni/Lobby;	Pub Finance; School
Stephen E. Balogh	Williams & McCarthy	Rockford	(815) 987-8900	Gov't/Muni/Lobby	Tub I mante, Senoor
Steven M. Kowal	Bell Boyd & Lloyd LLC	Chicago	(312) 807-4430	Fed Reg	
Douglas J. Antonio	Duane Morris LLP	Chicago	(312) 499-6772	Pub Finance	
Michael J. Silverman	Duane Morris LLP	Chicago	(312) 499-6707	Telecomm	
David M. Stahl	Eimer Stahl Klevorn & Solberg LLP	Chicago	(312) 660-7602	Pub Utilities	
E. Glenn Rippie	Foley & Lardner LLP	Chicago	(312) 558-4214		ni/Lobby; Pub Utilities
James C. Franczek, Jr.	Franczek Sullivan PC	Chicago	(312) 786-6110	School	m/1300by, 1 ab Culities
Roger H. Bickel	Freeborn & Peters LLP	Chicago	(312) 360-6377	Gov't/Muni/Lobhy	
Steven B. Kite	Gardner Carton & Douglas LLP	Chicago	(312) 569-1264	Pub Finance	
Anita J. Ponder	Gardner Carton & Douglas LLP	Chicago	(312) 569-1153	Gov't/Muni/Lobby	
Jesse H. Ruiz	Gardner Carton & Douglas LLP	Chicago	(312) 569-1135	Gov't/Muni/Lobby	
Richard M. Stock	Gardner Carton & Douglas LLP	Chicago	(312) 569-1398		ani/Lobbe
	Gessler Hughes Socol Piers Resnick & Dvm Ltd		(312) 604-2606	Fed Reg; Gov't/Mi	ши ковоу
Matthew J. Picrs		Chicago		Gov't/Muni/Lobby	
David A. Bonoma	Greenberg Traurig LLP	Chicago	(312) 456-8441	Gov't/Muni/Lobby	
Daniel L. Kraus	Greenberg Traurig LLP	Chicago	(312) 476-5004	Pub Finance	Dark Einer
Mark J. McCombs	Greenberg Traurig LLP Greenberg Traurig LLP Hinshaw & Culbertson LLP	Chicago	(312) 476-5026	Gov't/Muni/Lobby;	Pub Finance
Victor 11. Reyes	Greenberg fraung LLF	Chicago	(312) 456-8440	Gov't/Muni/Lobby	
Leo J. Athas	Hinsnaw & Culbertson LLP	Chicago	(312) 704-3000	School	
Anthony Ficarelli	Hinshaw & Culbertson LLP	Lisle	(630) 505-0010	School	
Allyn J. Franke	Hinshaw & Culbertson LLP	Waukegan	(847) 249-0300	School	
Thomas A. Morris, Jr.	Hinshaw & Culbertson LLP	Waukegan	(847) 249-0300	School	
Scott E. Nemanich	Hinshaw & Culbertson LLP Hinshaw & Culbertson LLP	Joliet	(815) 726-5910	School	
Steven M. Puiszis	Hinshaw & Culbertson LLP	Chicago	(312) 704-3243	Gov't/Muni/Lobby	
Robert T. Shannon	Hinshaw & Culbertson LLP	Chicago	(630) 505-0010 (847) 249-0300 (847) 249-0300 (815) 726-5910 (312) 704-3243 (312) 704-3901	Gov't/Muni/Lobby	
Stauley B. Eisenhammer	Ilodges Loizzi Eisenhammer Rodick & Kohn	Arlington Heights	(047) 0/0-2000	SCHOOL	
Therese L. Hodges	Hodges Loizzi Eisenhammer Rodick & Kohn	Arlington Heights	(847) 670-9000	School	
Steven M. Elrod	Holland & Knight LLP	Chicago	(312) 578-6565	Gov't/Muni/Lobby	
Nina J. Fain	Holland & Knight LLP	Chicago	(312) 715-5835		Pub Finance; School
Steven E. Glink	Law Office of Steven Glink	Northbrook	(847) 480-7749	School	
Keith D. Parr	Lord Bissell & Brook LLP	Chicago	(312) 443-0497	Fed Reg	
Stephen Scott Morrill	Morrill and Associates PC	Chicago	(312) 606-8770	Gov't/Muni/Lobby	
Oran F. Whiting	Much Shelist Freed Denenberg Ament & Rubenstein	Chicago	(312) 521-2638	Gov't/Muni/Lobby	
Thomas G. Lyons	O'Keefe Lyons & Hynes LLC	Cbicago	(312) 621-0400	Gov't/Muni/Lobby	
Karl R. Ottosen	Ottosen Trevarthen Britz Kelly & Cooper Ltd	Wheaton	(630) 682-0085	Gov't/Muni/Lobby	
Robert W. Trevarthen	Ottosen Trevarthen Britz Kelly & Cooper Ltd	Wheaton	(630) 682-0085	Gov't/Muni/Lobby;	School
Bruce Ackley Bonjour	Perkins Coie LLP	Chicago	(312) 324-8650 (312) 324-8662 (312) 917-8466	Pub Finance	
Robert L. Capizzi James R. Carroll	Perkins Coie LLP	Chicago	(312) 324-8662	Pub Finance	
James R. Carroll	Quinlan & Carroll Ltd	Chicago	(312) 917-8466	Gov't/Muni/Lobby	
William R. Quinlan Anthony G. Scariano	Quinlan & Carroll Ltd	Chicago	(312) 917-8450	Gov't/Muni/Lobby	
Anthony G. Scariano	Scariano Himes and Petrarca	Chicago	(312) 565-3100	School	
Andrew H. Connor	Schwartz Cooper Greenberger & Krauss Chtd	Chicago	(312) 845-5118	Pub Utilities	
Mary K. Klimesh	Seyfarth Shaw LLP	Chicago	(312) 346-8000	School	
Alvin L. Kruse	Scyfarth Shaw LLP	Chicago	(312) 346-8000	Pub Finance	
Richard S. Lauter	Seyfarth Shaw LLP	Chicago	(312) 781-8629	Fed Reg	
Paul H. Vishny	Scyfarth Shaw LLP	Chicago	(312) 346-8000	Telecomm	
Jack Guthman	Sbefsky & Froelicb Ltd	Chicago	(312) 836-4034	Gov't/Muni/Lobby	
Sarah J. Read	Sidley Austin Brown & Wood LLP	Chicago	(312) 853-2171	Pub Utilities	
Jeremy D. Margolis	Sonnenschein Nath & Rosenthal LLP	Chicago	(312) 853-2171 (312) 876-3108 (312) 977-9200	Gov't/Muni/Lobby	
Michael A. Ficaro	Ungaretti & Harris LLP	Chicago	(312) 977-9200	Gaming/Casino	
Deborah H. Bornstein	Williams Montgomery & John Ltd	Chicago	(312) 445-5289	Pub Utilities	
Gov. James R. Thompson	Winston & Strawn LLP	Chicago	(312) 558-7400 (815) 459-2050	Gov't/Muni/Lobby	
Richard G. Flood	Zukowski Rogers Flood & McArdle Heyl Royster Voelker & Allen PC	Crystal Lake	(815) 459-2050	Gov't/Muni/Lobby	
Timothy W. Kirk	Heyl Royster Voelker & Allen PC	Peoria	(309) 676-0400	Pub Utilities	
Frederick G. 11offman	11oward & 11oward Attorneys PC	Peoria	(309) 672-1483 (309) 828-5281	Pub Finance	
William C. Wetzel	Livingston Barger Brandt & Schroeder	Bloomington	(309) 828-5281	Pub Utilities	
Denise M. Druhot	Livingston Barger Brandt & Schroeder Brown Hay & Stephens LLP Freeborn & Peters LLP	Springfield	(217) 544-8491 (217) 535-1060 (217) 525-1571	School	
John E. Stevens	Freeborn & Peters LLP	Springfield	(217) 535-1060	Gov't/Muni/Lobby	
Herman G. Bodewes	Giffin Winning Cohen & Bodewes PC	Springfield	(217) 525-1571	Gov't/Muni/Lobby	
D. Bradley Blodgett	Hinshaw & Culbertson LLP	Springfield	(217) 528-7375	Gov't/Muni/Lobby	
Edward R. Gower	Hinshaw & Culbertson LLP	Springfield	(217) 528-7375	Gov't/Muni/Lobby	<i>*</i>
J. William Roberts	Hinshaw & Culbertson LLP	Springfield	(217) 528-7375	Gov't/Muni/Lobby	
Charles R. Schmadeke	Hinshaw & Culbertson LLP	Springfield	(217) 528-7375	Gov't/Muni/Lobby	
Deanna Seward Mool	Mool Law Firm, LLC	Springfield	(217) 523-6665	Gov't/Mnni/Lobby	
William R. Enlow	Sorling Northrup Hanna Cullen & Cochran Ltd	Springfield	(217) 544-1144	Gov't/Muni/Lobby	
James M. Morphew	Sorling Northrup Hanna Cullen & Cochran Ltd	Springfield	(217) 544-1144	Gov't/Muni/Lobby	
Zack Stamp	Zack Stamp 1.td	Springfield	(217) 525-0700	Gov't/Muni/Lohby	
Thomas E. Kennedy, 111	Law Office of Thomas E Kennedy 111	Alton	(618) 474-5326	School	
John L. Gilbert	Hinshaw & Culbertson LLP	Belleville	(618) 277-2400	Gov't/Muni/Lobby;	School
John S. Rendleman, III	Feirich/Mager/Green/Ryan	Carbondale	(618) 529-3000	Gov't/Muni/Lobby	
Kov.					

Kev:

Fed Reg = Federal Regulatory Law; Fed Reg = Federal Regulatory Law; Gaming/Casino = Gaming & Casino Law; Gov't/Muni/Lobby = Governmental, Municipal, Lobbying & Administrative Law; Pub Finance = Public Finance Law; Gas/Water/Electric; School = School Law; Telecomm = Telecommunications Law

This is a partial list. Go to Leading Lawyers.com to view profiles of these and hundreds of other Leading Lawyers or call

Find a better lawyer, faster.

(312) 644-7000

A Division of Law Bulletin Publishing Company - est. 1854